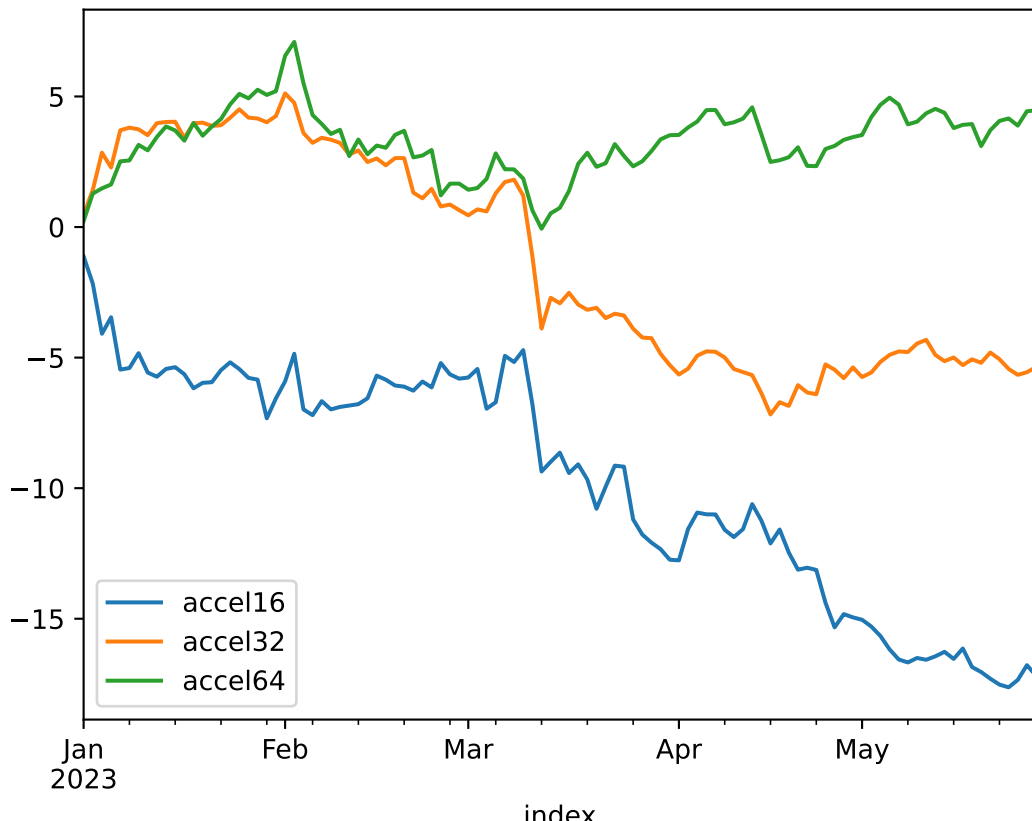
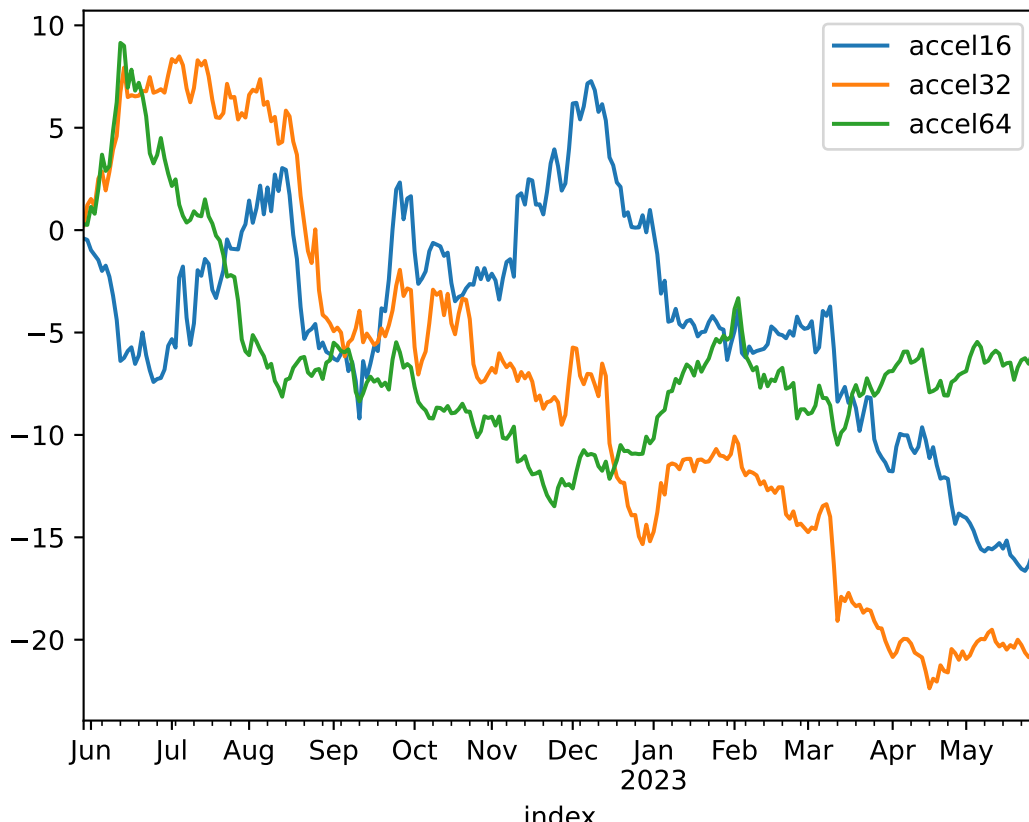


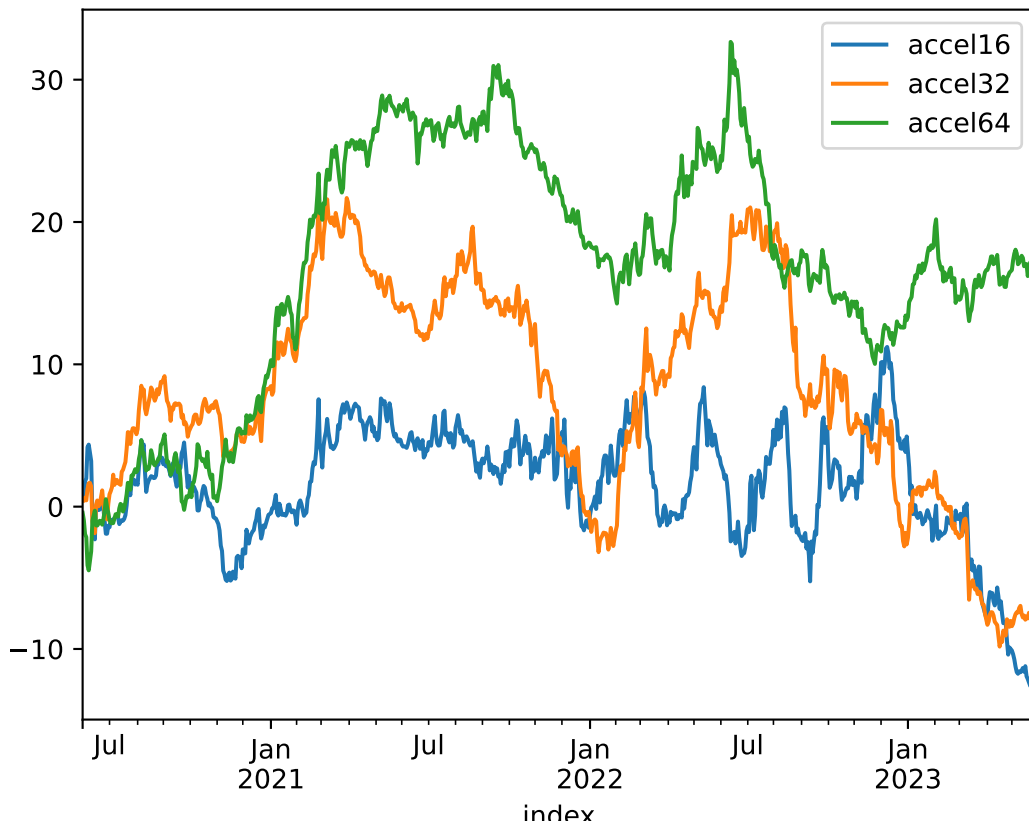
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -41.891, 'accel32': -13.074, 'accel64': 10.891}
ann. std {'accel16': 11.888, 'accel32': 9.308, 'accel64': 8.912}
ann. SR {'accel16': -3.52, 'accel32': -1.4, 'accel64': 1.22}



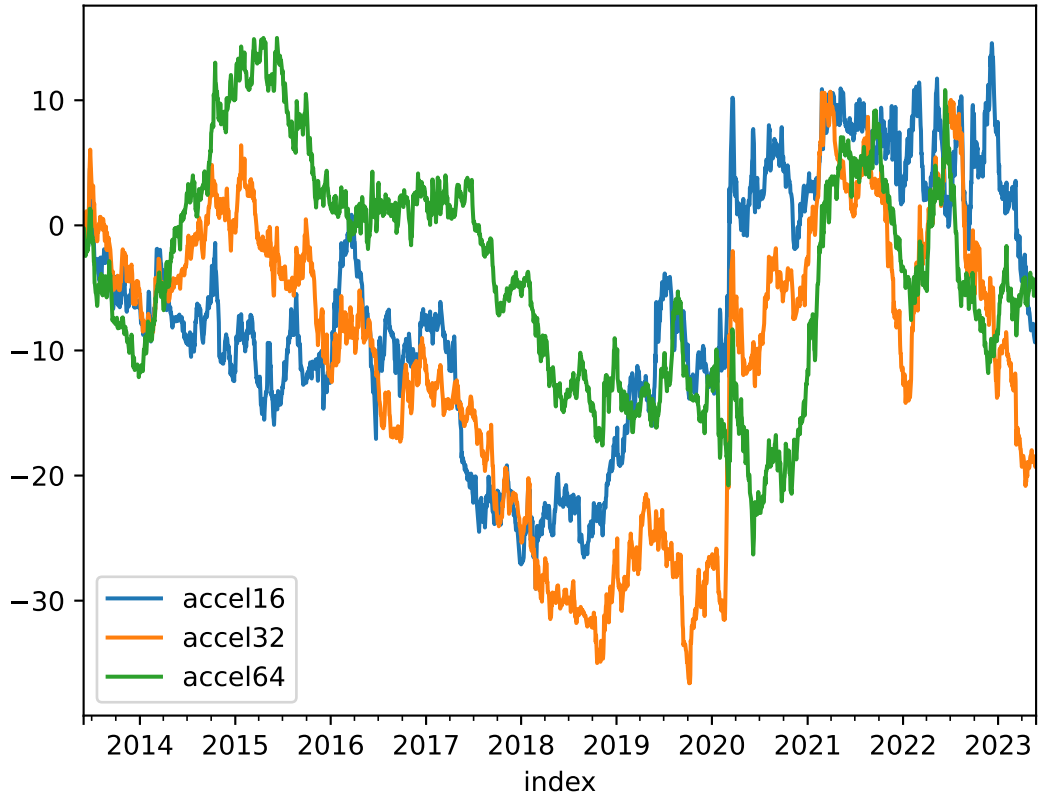
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -15.947, 'accel32': -20.241, 'accel64': -5.853}
ann. std {'accel16': 15.427, 'accel32': 12.771, 'accel64': 10.203}
ann. SR {'accel16': -1.03, 'accel32': -1.58, 'accel64': -0.57}



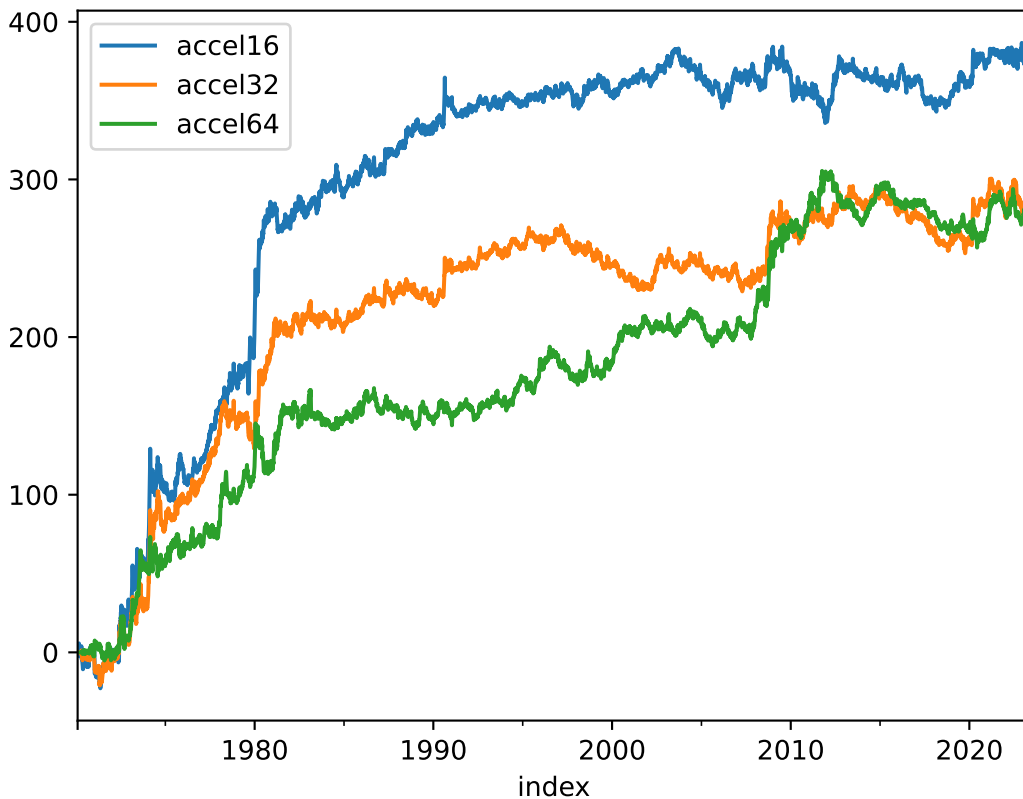
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -4.02, 'accel32': -2.631, 'accel64': 5.766}
ann. std {'accel16': 13.496, 'accel32': 11.748, 'accel64': 10.417}
ann. SR {'accel16': -0.3, 'accel32': -0.22, 'accel64': 0.55}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.875, 'accel32': -1.867, 'accel64': -0.419}
ann. std {'accel16': 11.68, 'accel32': 10.661, 'accel64': 9.308}
ann. SR {'accel16': -0.07, 'accel32': -0.18, 'accel64': -0.05}

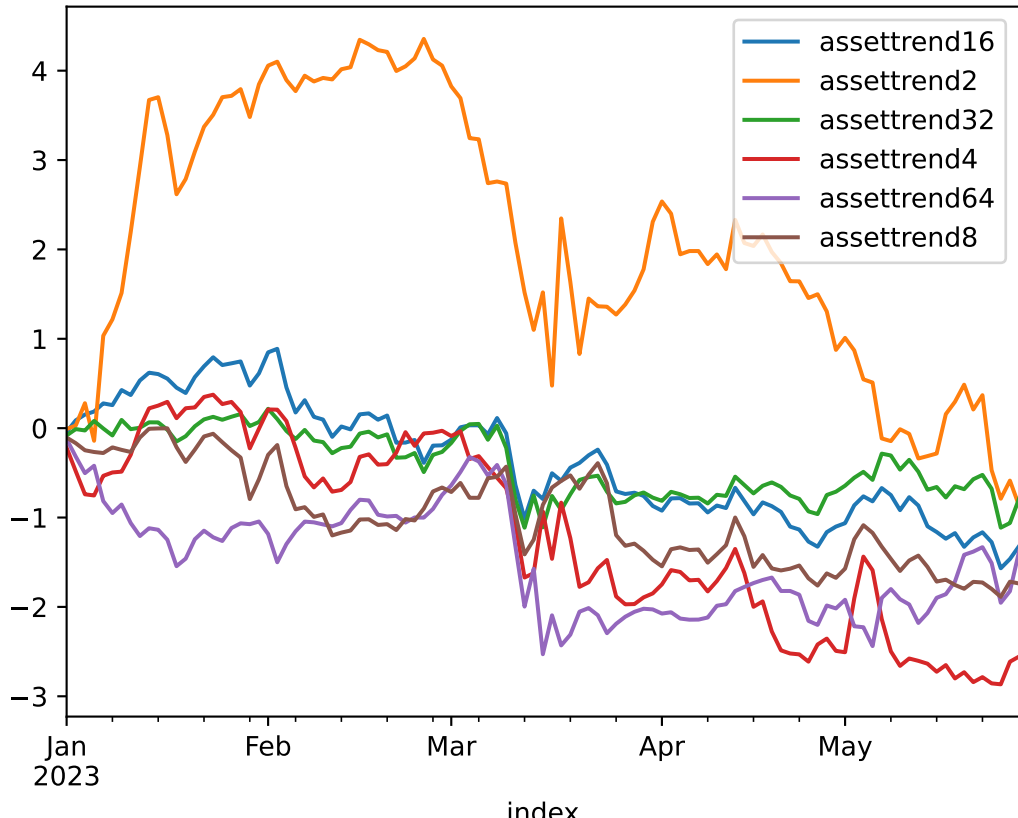


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.684, 'accel32': 4.984, 'accel64': 5.132}
ann. std {'accel16': 14.121, 'accel32': 12.446, 'accel64': 12.096}
ann. SR {'accel16': 0.47, 'accel32': 0.4, 'accel64': 0.42}



Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.218, 'assetrend2': -2.119, 'assetrend32': -1.921, 'assetrend4': -6.231, 'assetrend64': -3.361, 'assetrend8': -4.238}
 ann. std {'assetrend16': 2.466, 'assetrend2': 6.265, 'assetrend32': 2.36, 'assetrend4': 3.659, 'assetrend64': 3.428, 'assetrend8': 2.726}
 ann. SR {'assetrend16': -1.31, 'assetrend2': -0.34, 'assetrend32': -0.81, 'assetrend4': -1.7, 'assetrend64': -0.98, 'assetrend8': -1.55}

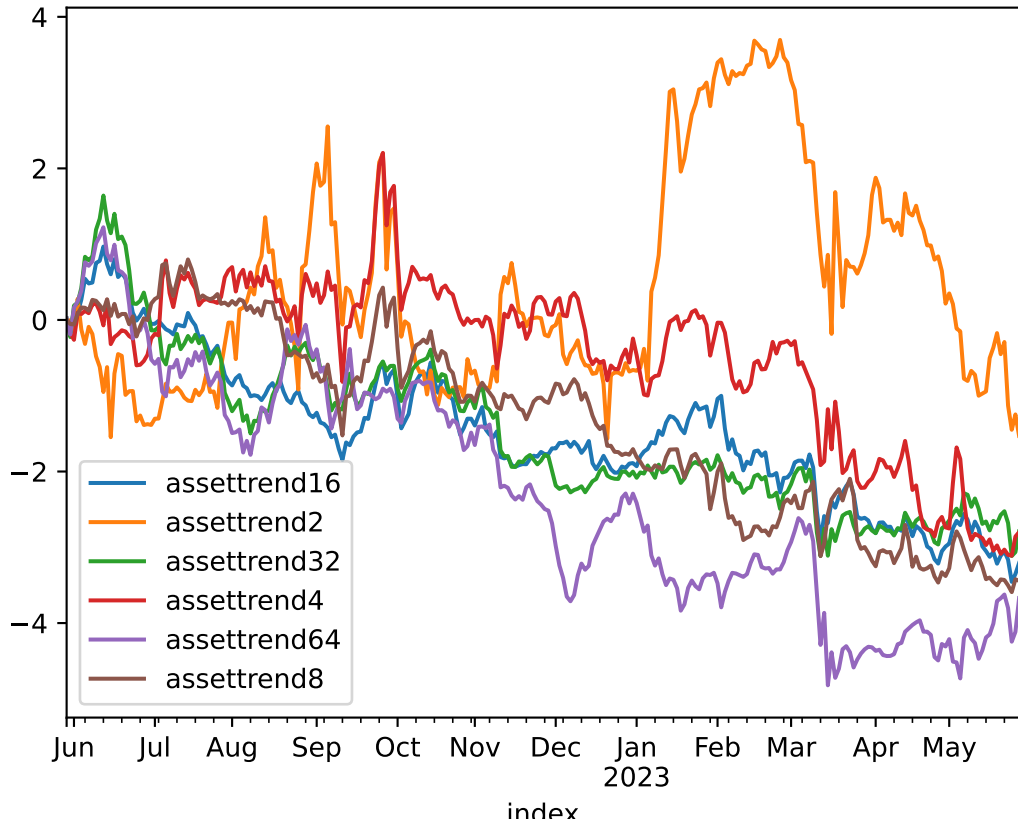


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -3.159, 'assettrend2': -1.506, 'assettrend32': -2.747, 'assettrend4': -2.757, 'assettrend64': -3.614, 'assettrend8': -3.39}

ann. std {'assettrend16': 2.255, 'assettrend2': 6.203, 'assettrend32': 2.512, 'assettrend4': 3.926, 'assettrend64': 3.191, 'assettrend8': 2.641}

ann. SR {'assettrend16': -1.4, 'assettrend2': -0.24, 'assettrend32': -1.09, 'assettrend4': -0.7, 'assettrend64': -1.13, 'assettrend8': -1.28}

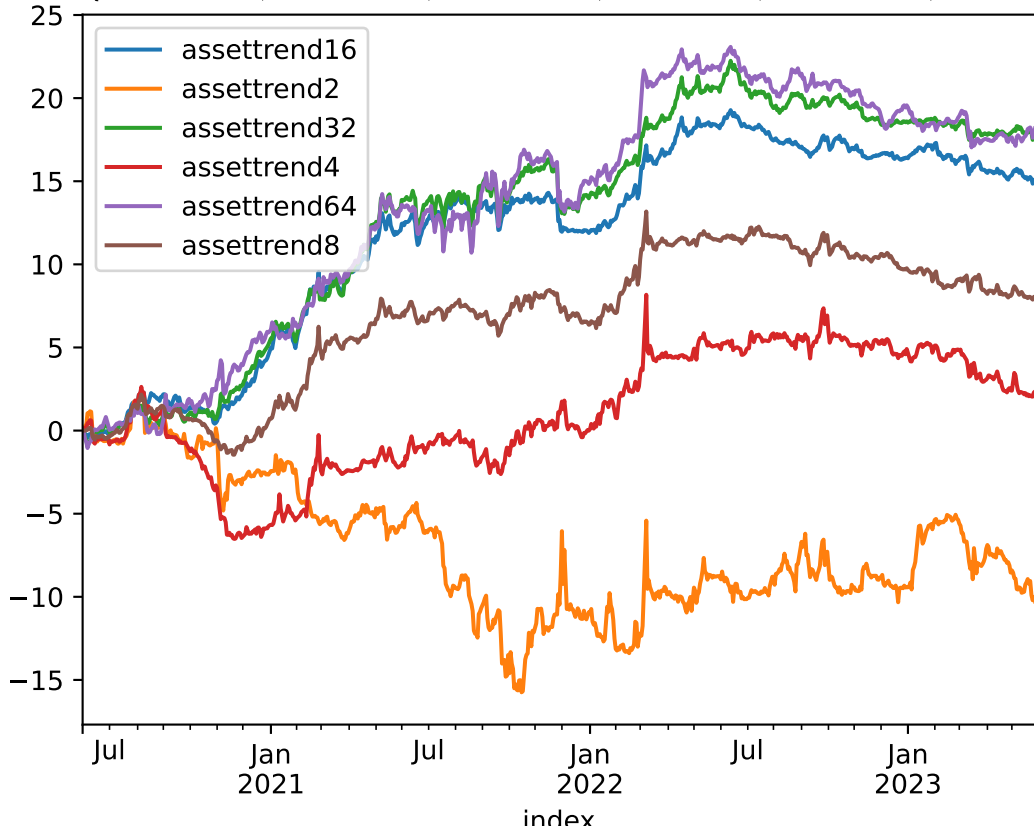


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.956, 'assettrend2': -3.377, 'assettrend32': 5.847, 'assettrend4': 0.772, 'assettrend64': 5.969, 'assettrend8': 2.635}

ann. std {'assettrend16': 3.424, 'assettrend2': 7.844, 'assettrend32': 4.14, 'assettrend4': 4.988, 'assettrend64': 5.031, 'assettrend8': 3.536}

ann. SR {'assettrend16': 1.45, 'assettrend2': -0.43, 'assettrend32': 1.41, 'assettrend4': 0.15, 'assettrend64': 1.19, 'assettrend8': 0.75}

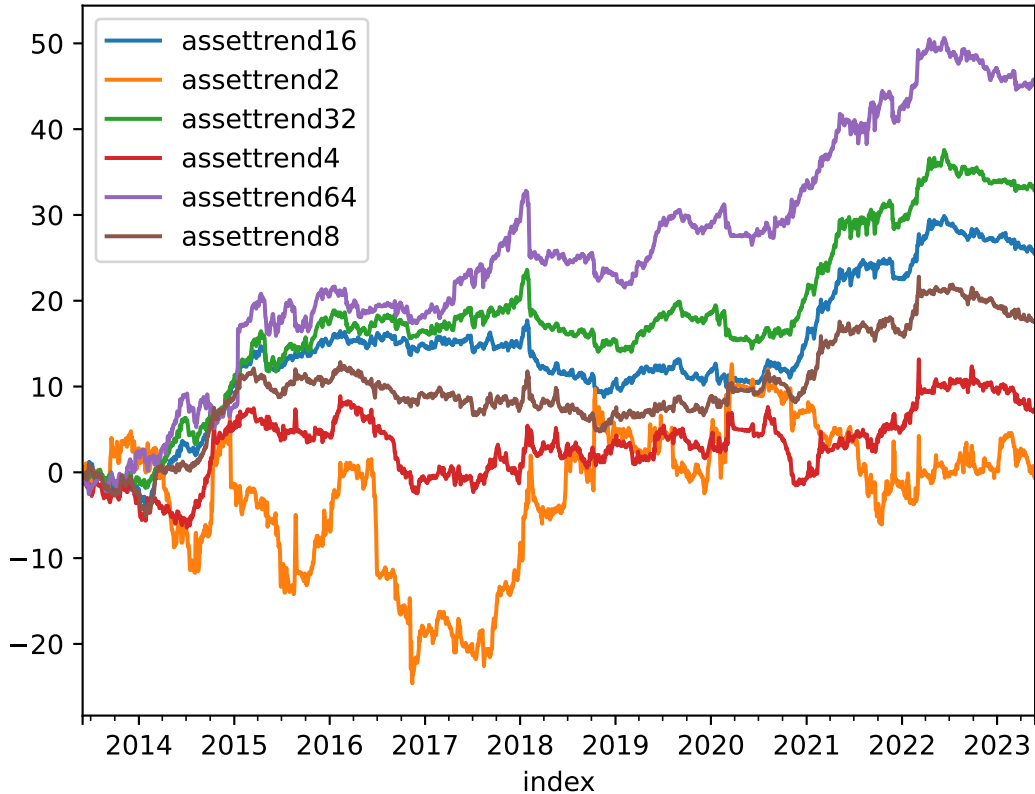


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.525, 'assettrend2': -0.062, 'assettrend32': 3.255, 'assettrend4': 0.722, 'assettrend64': 4.492, 'assettrend8': 1.733}

ann. std {'assettrend16': 3.15, 'assettrend2': 9.771, 'assettrend32': 3.588, 'assettrend4': 4.972, 'assettrend64': 5.195, 'assettrend8': 3.446}

ann. SR {'assettrend16': 0.8, 'assettrend2': -0.01, 'assettrend32': 0.91, 'assettrend4': 0.15, 'assettrend64': 0.86, 'assettrend8': 0.5}

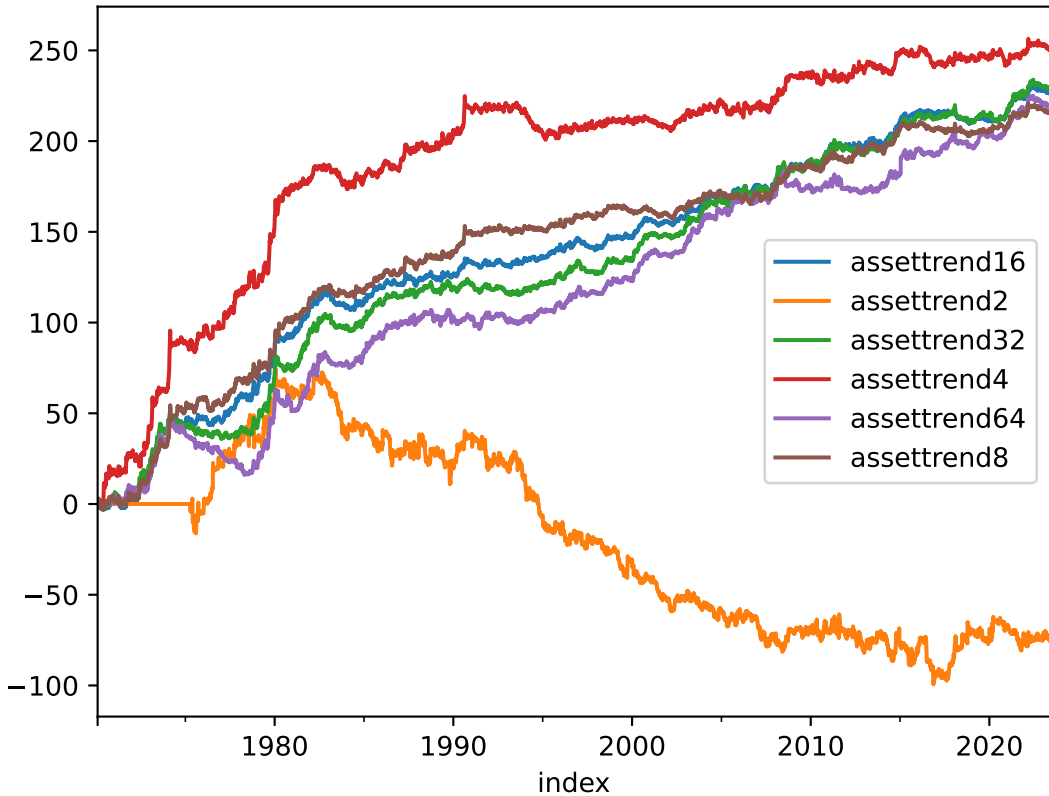


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.166, 'assettrend2': -1.388, 'assettrend32': 4.222, 'assettrend4': 4.611, 'assettrend64': 4.05, 'assettrend8': 3.967}

ann. std {'assettrend16': 4.301, 'assettrend2': 10.254, 'assettrend32': 4.492, 'assettrend4': 6.543, 'assettrend64': 4.993, 'assettrend8': 4.63}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.14, 'assettrend32': 0.94, 'assettrend4': 0.7, 'assettrend64': 0.81, 'assettrend8': 0.86}

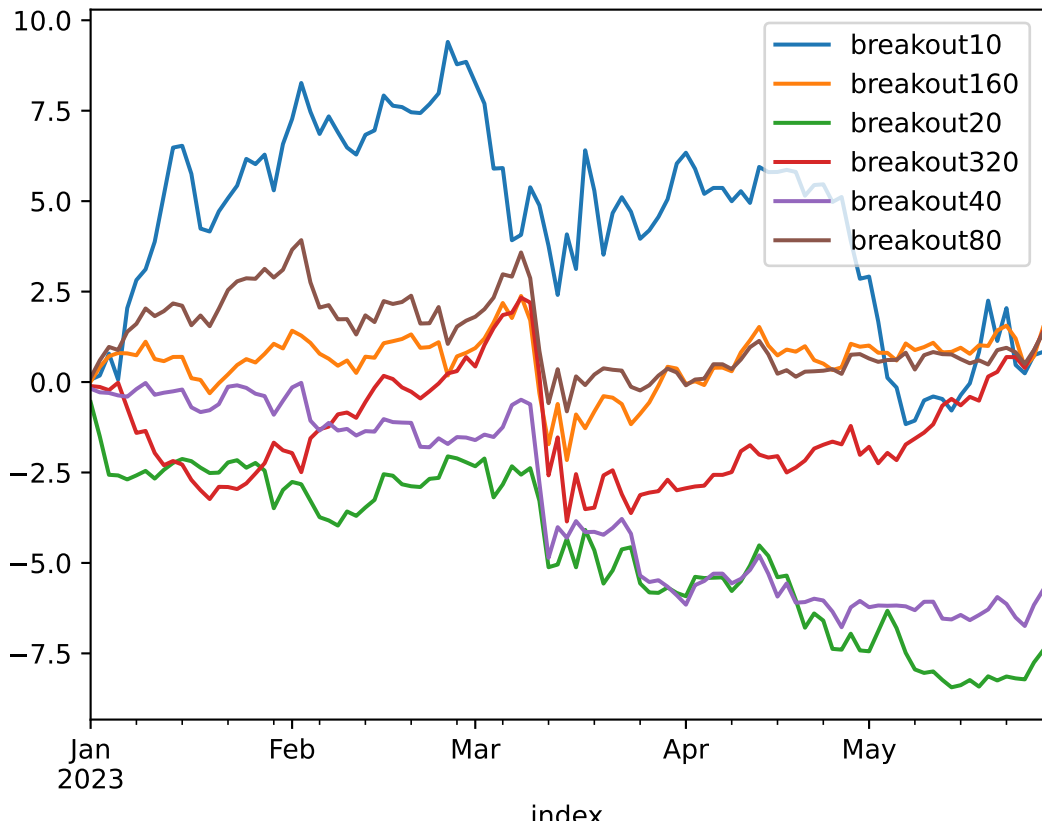


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 2.032, 'breakout160': 3.678, 'breakout20': -18.088, 'breakout320': 3.403, 'breakout40': -14.018, 'breakout80': 3.32}

ann. std {'breakout10': 13.819, 'breakout160': 7.419, 'breakout20': 7.361, 'breakout320': 8.963, 'breakout40': 6.855, 'breakout80': 7.25}

ann. SR {'breakout10': 0.15, 'breakout160': 0.5, 'breakout20': -2.46, 'breakout320': 0.38, 'breakout40': -2.04, 'breakout80': 0.46}

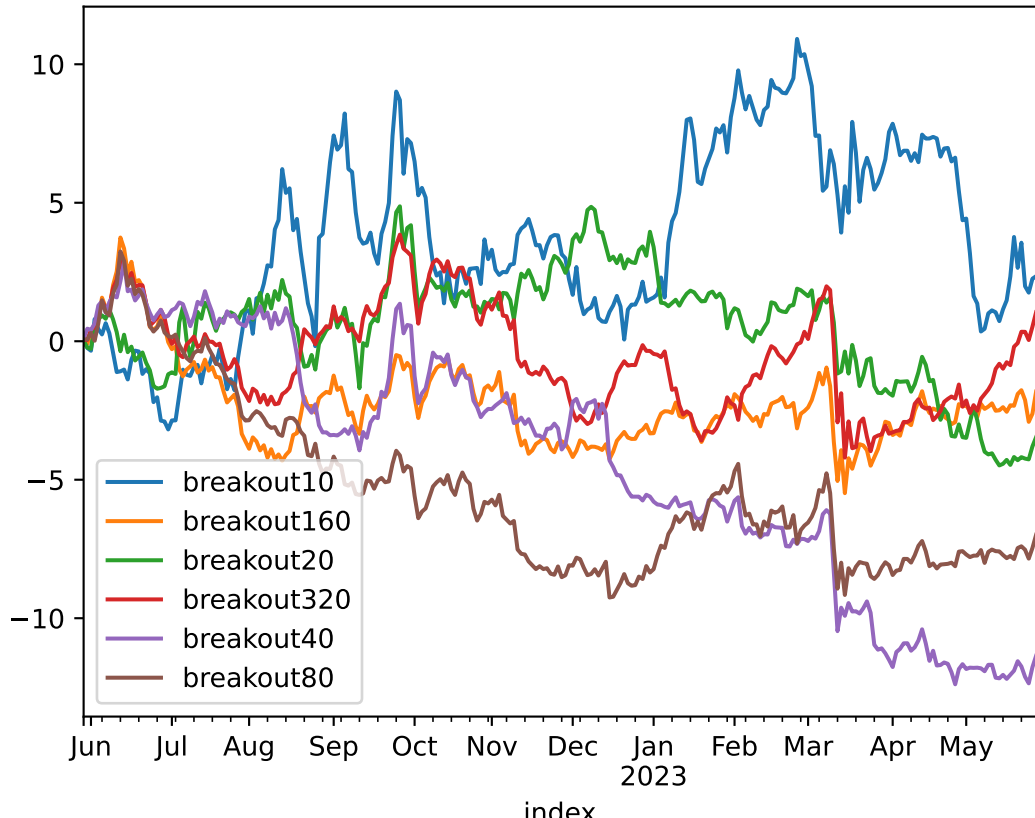


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.311, 'breakout160': -1.791, 'breakout20': -3.412, 'breakout320': 1.031, 'breakout40': -11.184, 'breakout80': -6.881}

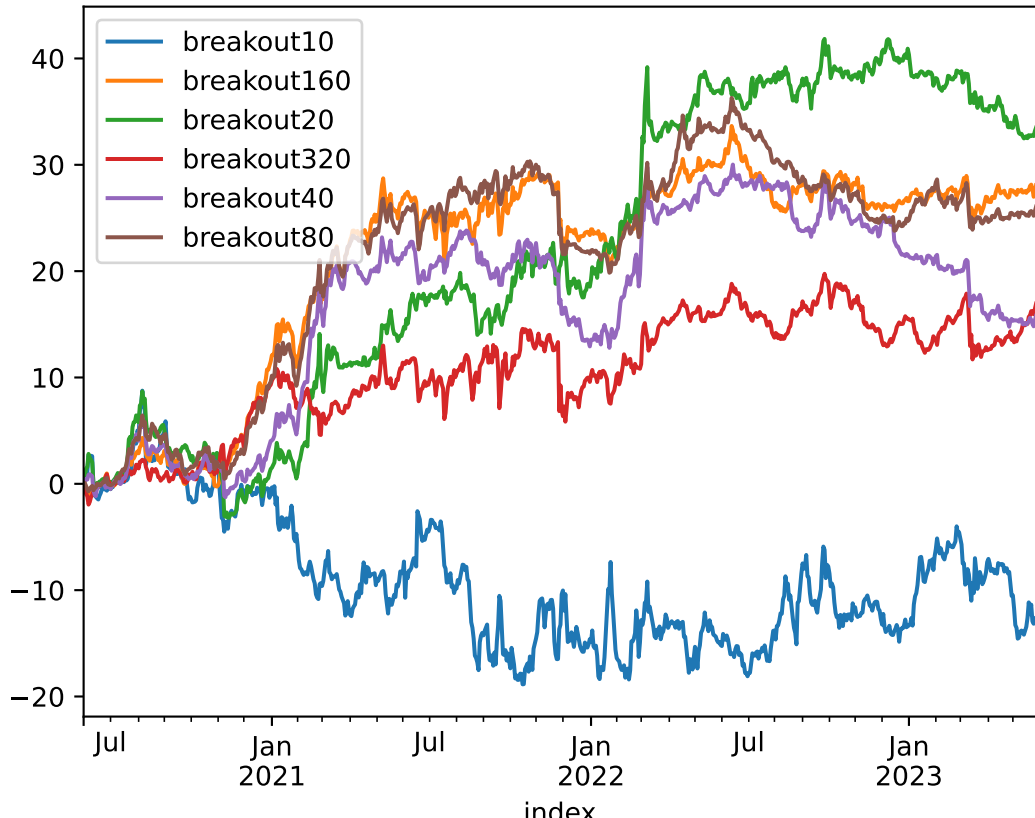
ann. std {'breakout10': 13.388, 'breakout160': 6.977, 'breakout20': 8.368, 'breakout320': 7.595, 'breakout40': 7.127, 'breakout80': 6.508}

ann. SR {'breakout10': 0.17, 'breakout160': -0.26, 'breakout20': -0.41, 'breakout320': 0.14, 'breakout40': -1.57, 'breakout80': -1.06}



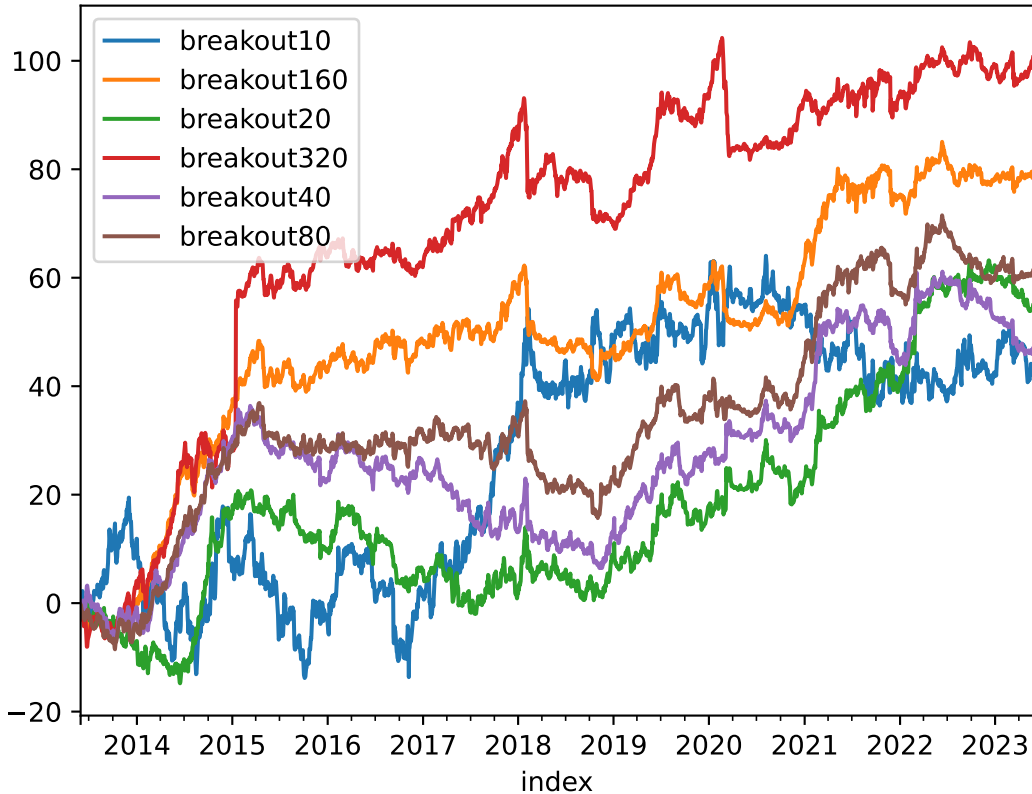
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.124, 'breakout160': 9.218, 'breakout20': 10.996, 'breakout320': 5.562, 'breakout40': 5.187, 'breakout80': 8.555}
ann. std {'breakout10': 15.178, 'breakout160': 9.217, 'breakout20': 11.087, 'breakout320': 9.924, 'breakout40': 9.505, 'breakout80': 8.925}
ann. SR {'breakout10': -0.27, 'breakout160': 1.0, 'breakout20': 0.99, 'breakout320': 0.56, 'breakout40': 0.55, 'breakout80': 0.96}



Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.195, 'breakout160': 7.806, 'breakout20': 5.39, 'breakout320': 9.881, 'breakout40': 4.606, 'breakout80': 6.017}
ann. std {'breakout10': 17.792, 'breakout160': 8.852, 'breakout20': 11.046, 'breakout320': 13.084, 'breakout40': 9.354, 'breakout80': 8.703}
ann. SR {'breakout10': 0.24, 'breakout160': 0.88, 'breakout20': 0.49, 'breakout320': 0.76, 'breakout40': 0.49, 'breakout80': 0.69}

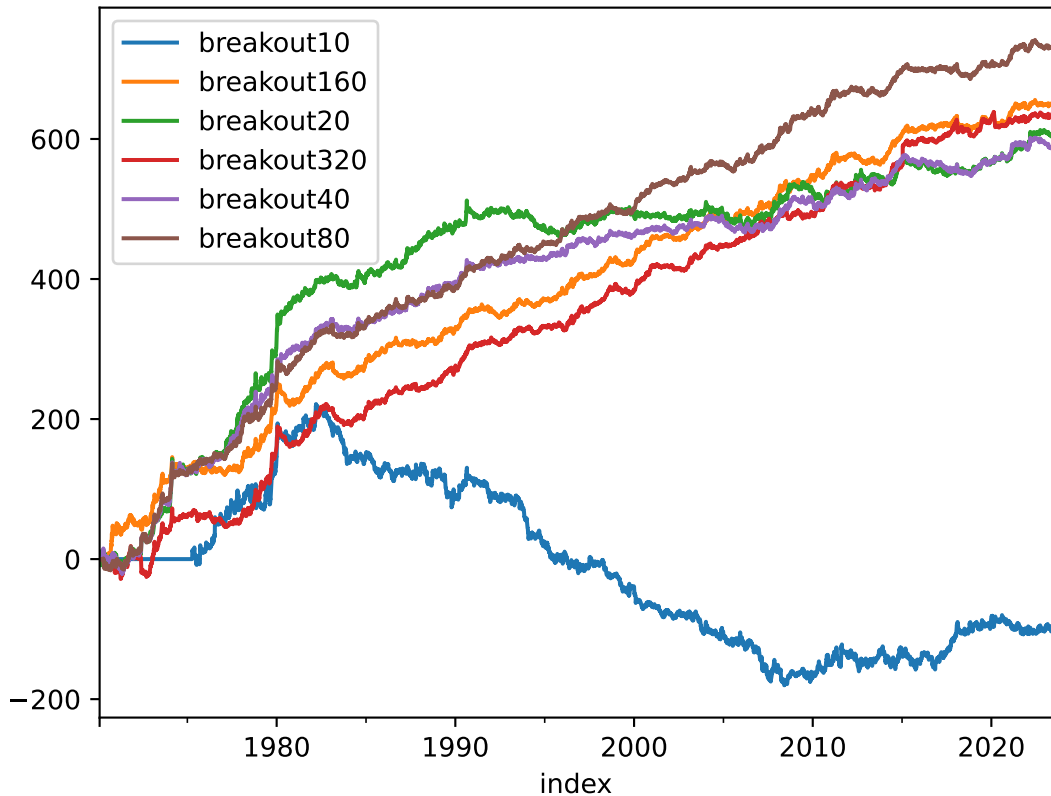


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.864, 'breakout160': 11.968, 'breakout20': 11.126, 'breakout320': 11.689, 'breakout40': 10.818, 'breakout80': 13.459}

ann. std {'breakout10': 21.308, 'breakout160': 11.521, 'breakout20': 14.88, 'breakout320': 12.107, 'breakout40': 12.103, 'breakout80': 11.708}

ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.97, 'breakout40': 0.89, 'breakout80': 1.15}

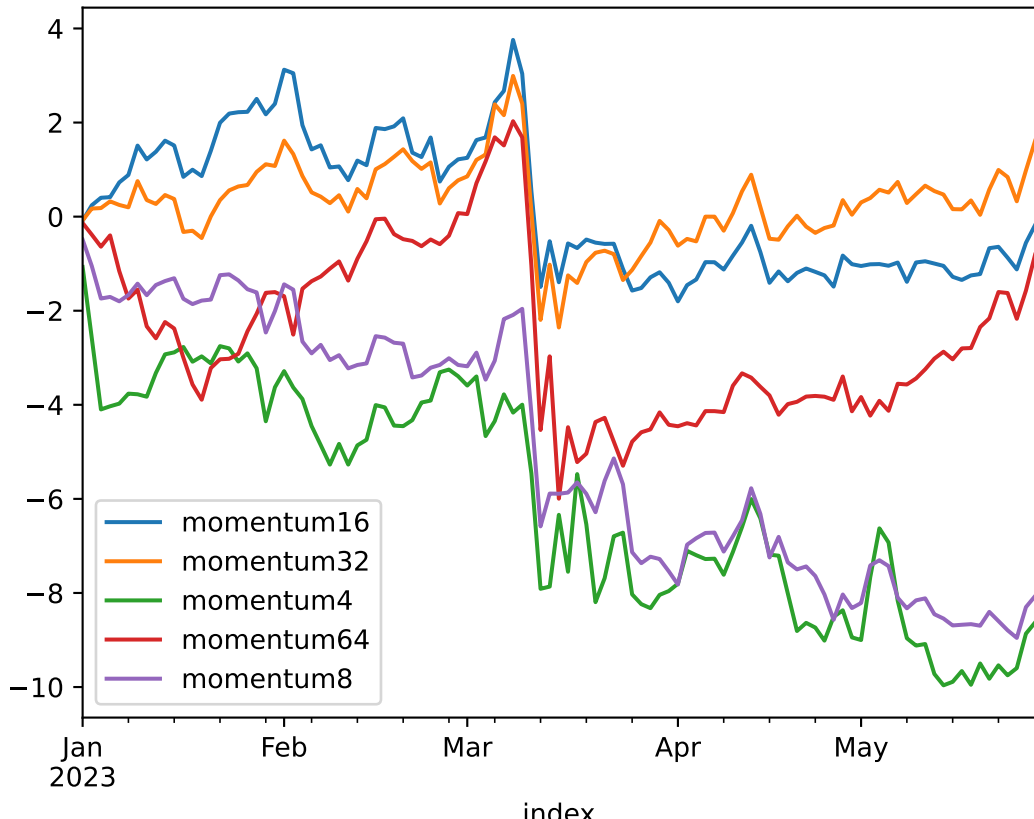


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -0.436, 'momentum32': 3.925, 'momentum4': -21.033, 'momentum64': -1.976, 'momentum8': -19.667}

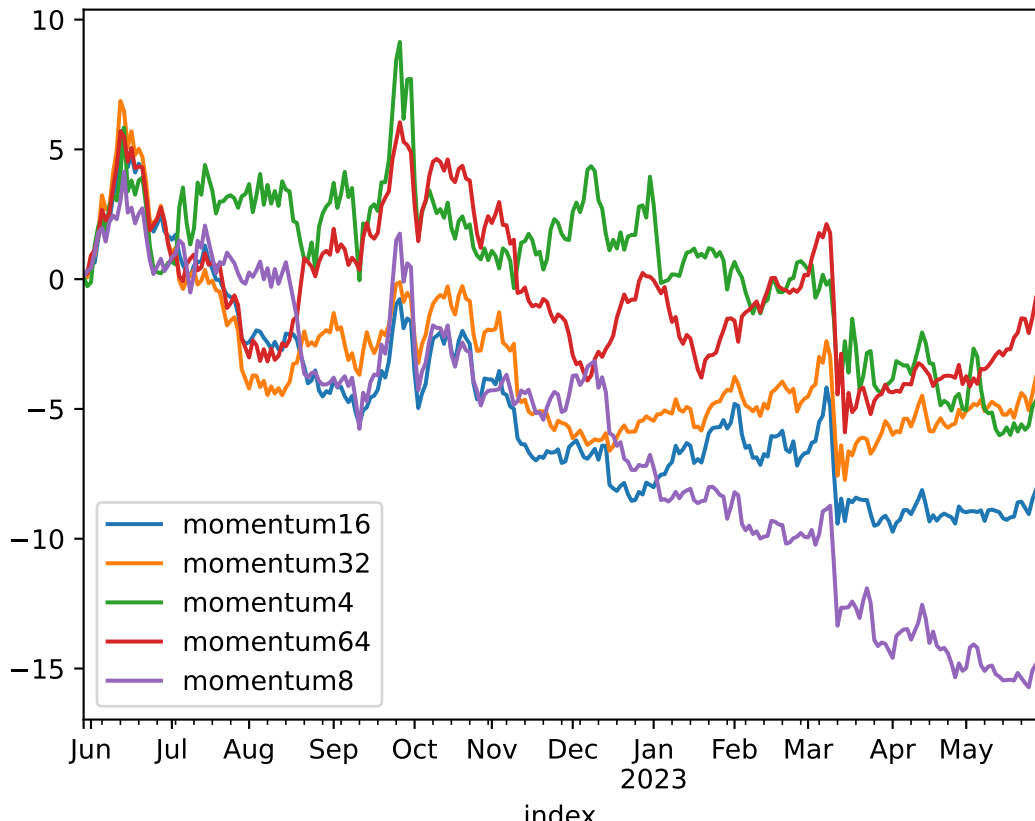
ann. std {'momentum16': 8.071, 'momentum32': 8.206, 'momentum4': 10.755, 'momentum64': 10.869, 'momentum8': 8.174}

ann. SR {'momentum16': -0.05, 'momentum32': 0.48, 'momentum4': -1.96, 'momentum64': -0.18, 'momentum8': -2.41}



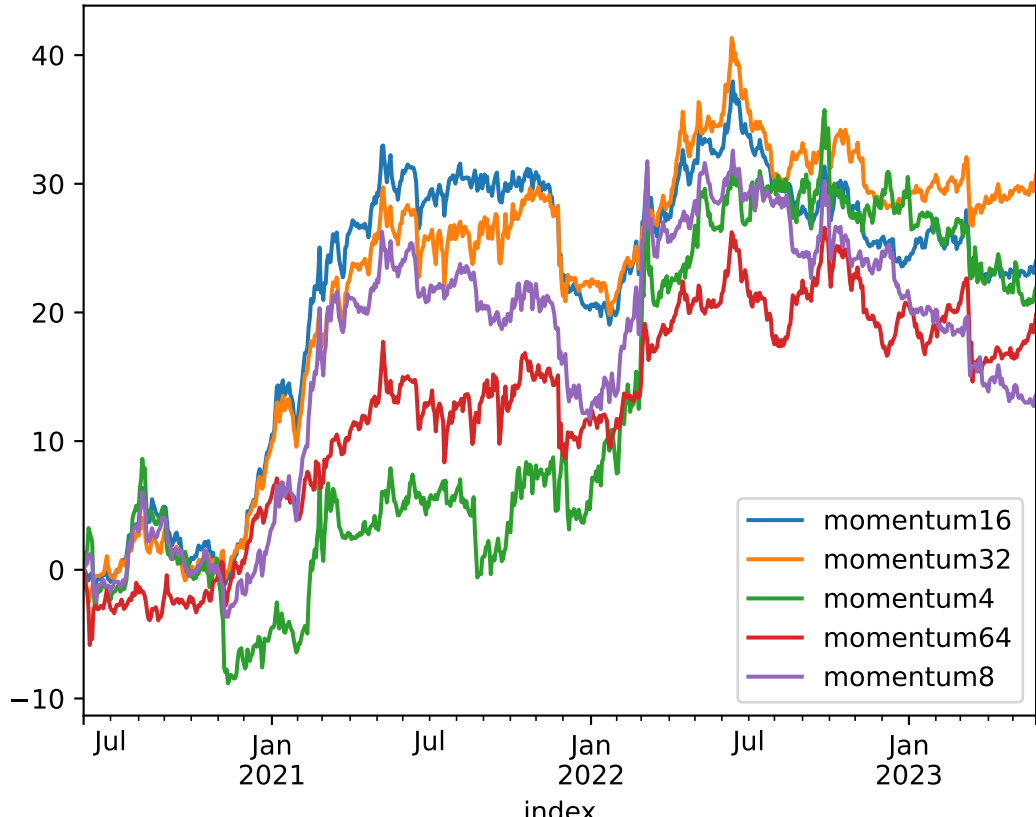
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -7.983, 'momentum32': -3.71, 'momentum4': -4.606, 'momentum64': -0.705, 'momentum8': -14.607}
ann. std {'momentum16': 8.492, 'momentum32': 8.823, 'momentum4': 13.172, 'momentum64': 10.185, 'momentum8': 9.699}
ann. SR {'momentum16': -0.94, 'momentum32': -0.42, 'momentum4': -0.35, 'momentum64': -0.07, 'momentum8': -1.51}



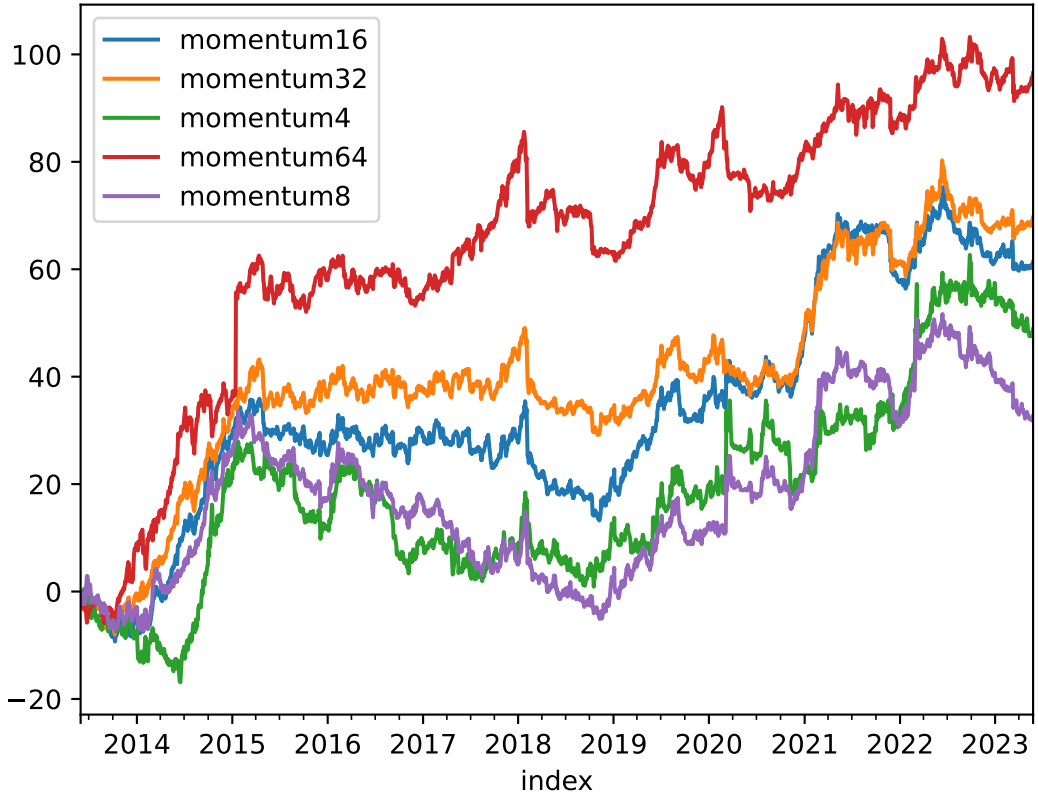
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.879, 'momentum32': 10.077, 'momentum4': 7.192, 'momentum64': 6.505, 'momentum8': 4.466}
ann. std {'momentum16': 10.133, 'momentum32': 10.387, 'momentum4': 14.715, 'momentum64': 10.833, 'momentum8': 11.454}
ann. SR {'momentum16': 0.78, 'momentum32': 0.97, 'momentum4': 0.49, 'momentum64': 0.6, 'momentum8': 0.39}



Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 6.023, 'momentum32': 6.839, 'momentum4': 4.797, 'momentum64': 9.476, 'momentum8': 3.209}
ann. std {'momentum16': 9.627, 'momentum32': 9.254, 'momentum4': 13.668, 'momentum64': 11.873, 'momentum8': 10.827}
ann. SR {'momentum16': 0.63, 'momentum32': 0.74, 'momentum4': 0.35, 'momentum64': 0.8, 'momentum8': 0.3}

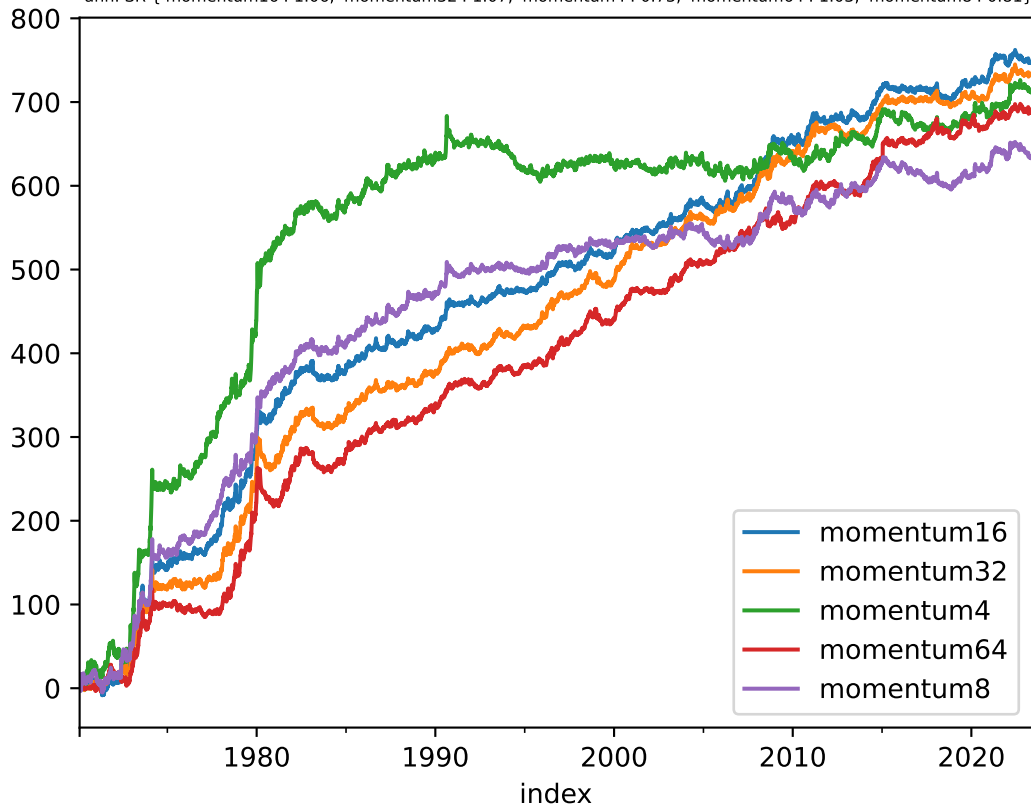


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.773, 'momentum32': 13.515, 'momentum4': 13.113, 'momentum64': 12.721, 'momentum8': 11.659}

ann. std {'momentum16': 13.037, 'momentum32': 12.601, 'momentum4': 17.882, 'momentum64': 12.323, 'momentum8': 14.321}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.73, 'momentum64': 1.03, 'momentum8': 0.81}

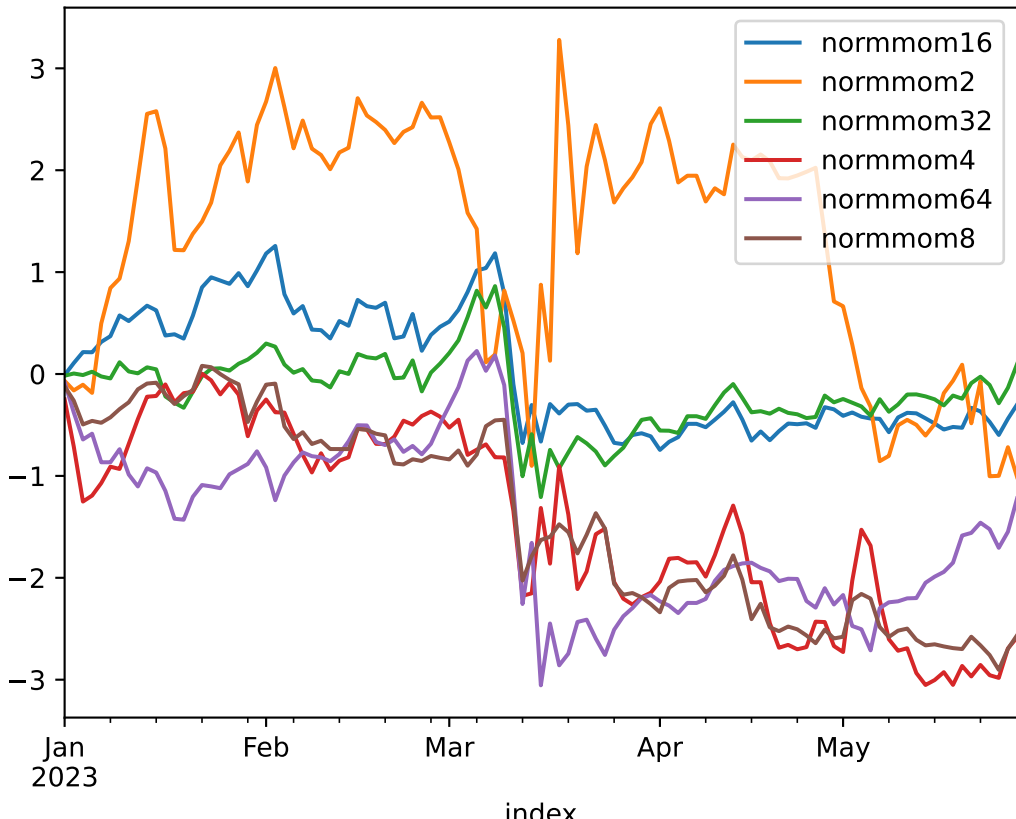


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -0.73, 'normmom2': -2.465, 'normmom32': 0.239, 'normmom4': -6.302, 'normmom64': -2.976, 'normmom8': -6.249}

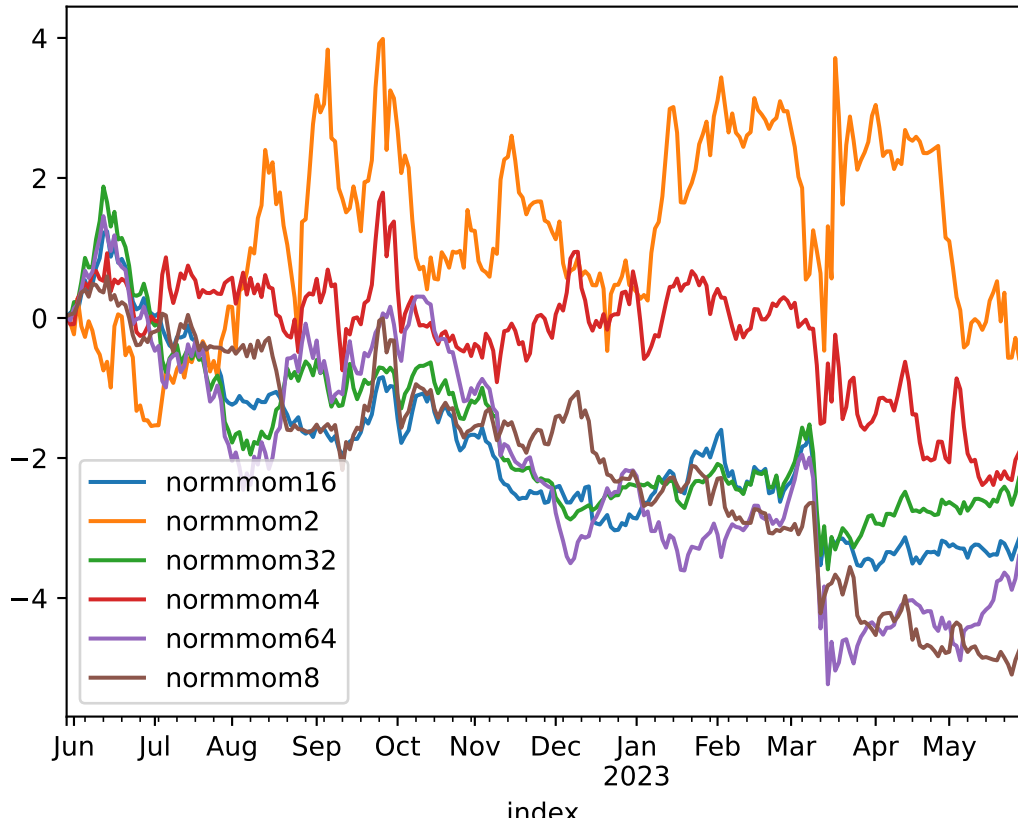
ann. std {'normmom16': 2.894, 'normmom2': 8.539, 'normmom32': 2.862, 'normmom4': 4.46, 'normmom64': 4.285, 'normmom8': 2.913}

ann. SR {'normmom16': -0.25, 'normmom2': -0.29, 'normmom32': 0.08, 'normmom4': -1.41, 'normmom64': -0.69, 'normmom8': -2.15}



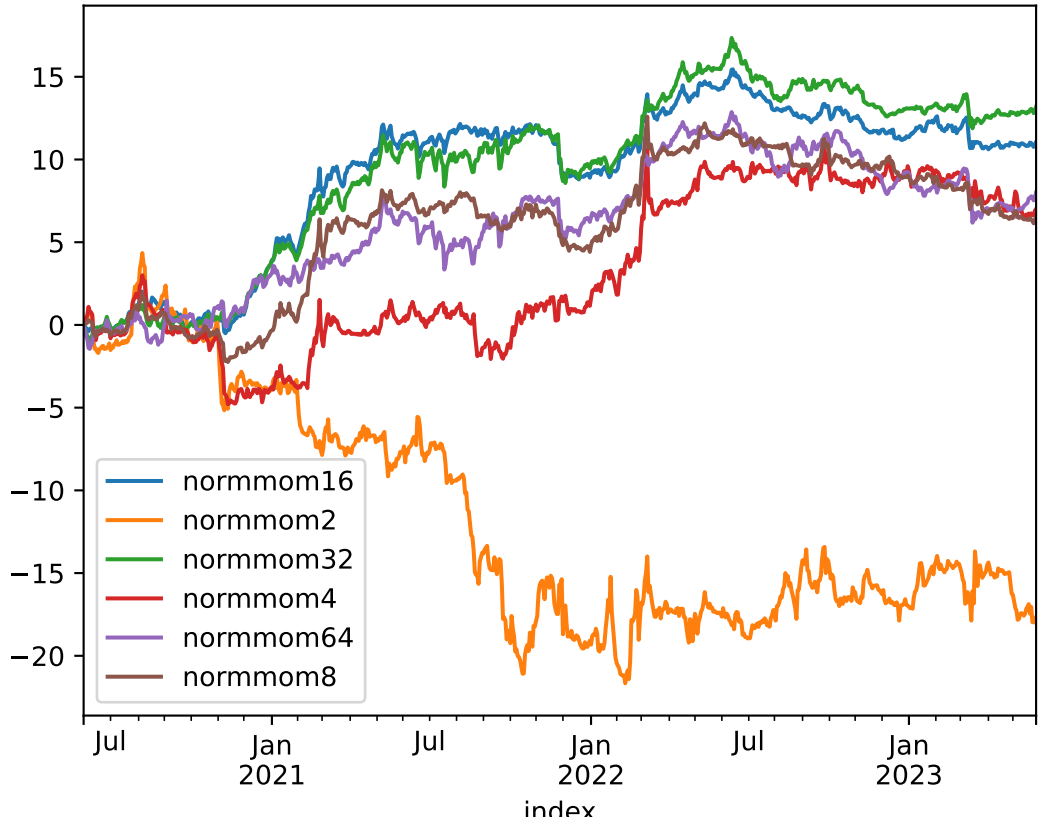
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.105, 'normmom2': -0.568, 'normmom32': -2.25, 'normmom4': -1.889, 'normmom64': -3.345, 'normmom8': -4.68}
 ann. std {'normmom16': 2.533, 'normmom2': 7.523, 'normmom32': 2.838, 'normmom4': 4.341, 'normmom64': 3.844, 'normmom8': 2.887}
 ann. SR {'normmom16': -1.23, 'normmom2': -0.08, 'normmom32': -0.79, 'normmom4': -0.44, 'normmom64': -0.87, 'normmom8': -1.62}



Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.629, 'normmom2': -5.901, 'normmom32': 4.328, 'normmom4': 2.302, 'normmom64': 2.63, 'normmom8': 2.127}
ann. std {'normmom16': 3.512, 'normmom2': 8.677, 'normmom32': 3.879, 'normmom4': 5.422, 'normmom64': 4.263, 'normmom8': 3.946}
ann. SR {'normmom16': 1.03, 'normmom2': -0.68, 'normmom32': 1.12, 'normmom4': 0.42, 'normmom64': 0.62, 'normmom8': 0.54}

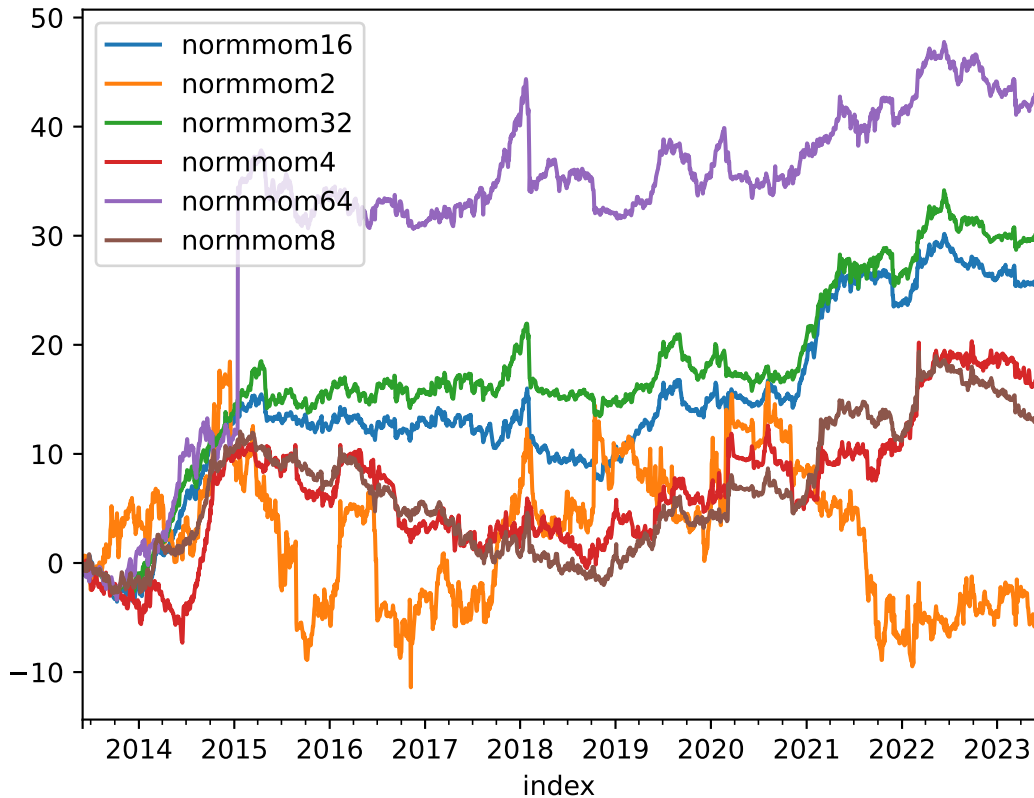


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.532, 'normmom2': -0.569, 'normmom32': 2.947, 'normmom4': 1.632, 'normmom64': 4.214, 'normmom8': 1.302}

ann. std {'normmom16': 3.455, 'normmom2': 10.315, 'normmom32': 3.613, 'normmom4': 5.445, 'normmom64': 8.274, 'normmom8': 3.871}

ann. SR {'normmom16': 0.73, 'normmom2': -0.06, 'normmom32': 0.82, 'normmom4': 0.3, 'normmom64': 0.51, 'normmom8': 0.34}

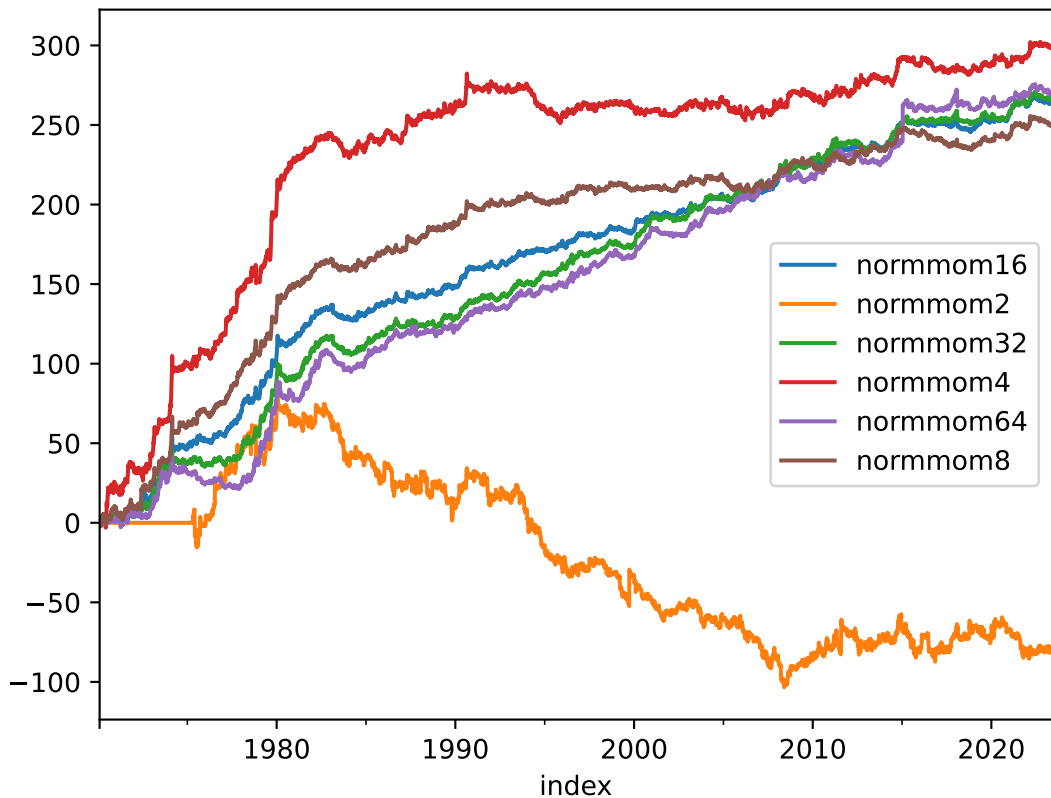


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.856, 'normmom2': -1.504, 'normmom32': 4.915, 'normmom4': 5.494, 'normmom64': 4.985, 'normmom8': 4.594}

ann. std {'normmom16': 4.529, 'normmom2': 11.603, 'normmom32': 4.606, 'normmom4': 7.38, 'normmom64': 5.866, 'normmom8': 5.361}

ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.74, 'normmom64': 0.85, 'normmom8': 0.86}

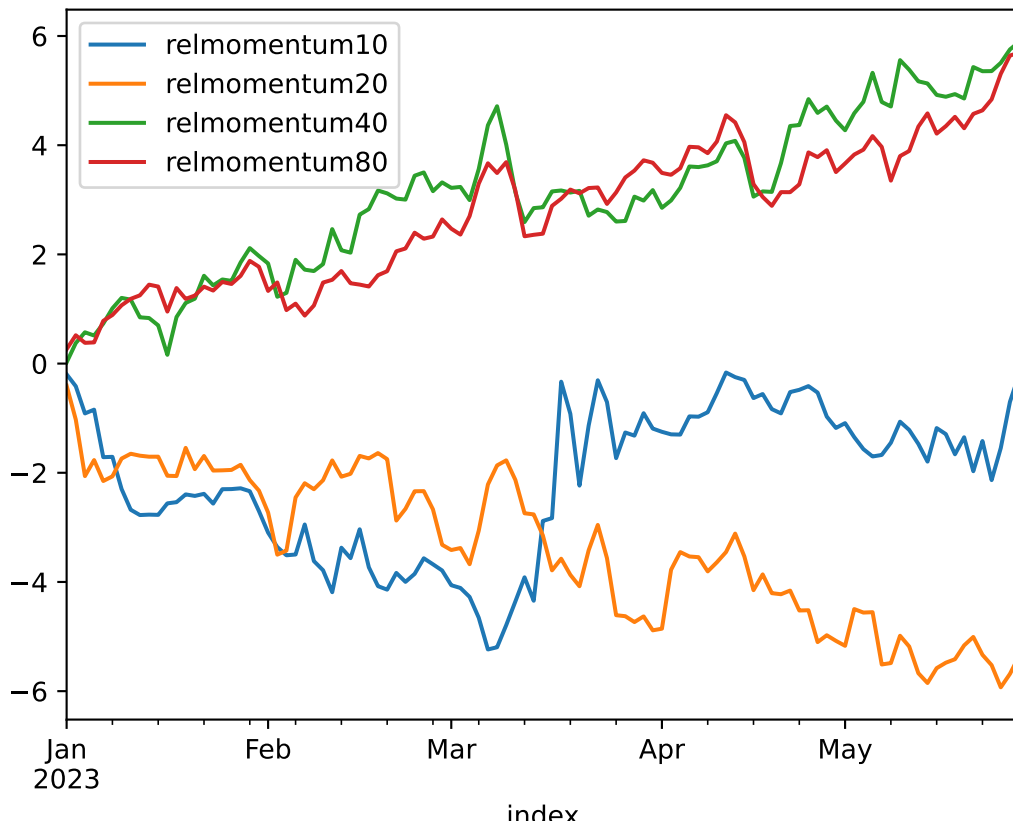


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -0.485, 'relmomentum20': -13.06, 'relmomentum40': 14.365, 'relmomentum80': 13.88}

ann. std {'relmomentum10': 7.84, 'relmomentum20': 6.423, 'relmomentum40': 5.272, 'relmomentum80': 4.384}

ann. SR {'relmomentum10': -0.06, 'relmomentum20': -2.03, 'relmomentum40': 2.72, 'relmomentum80': 3.17}

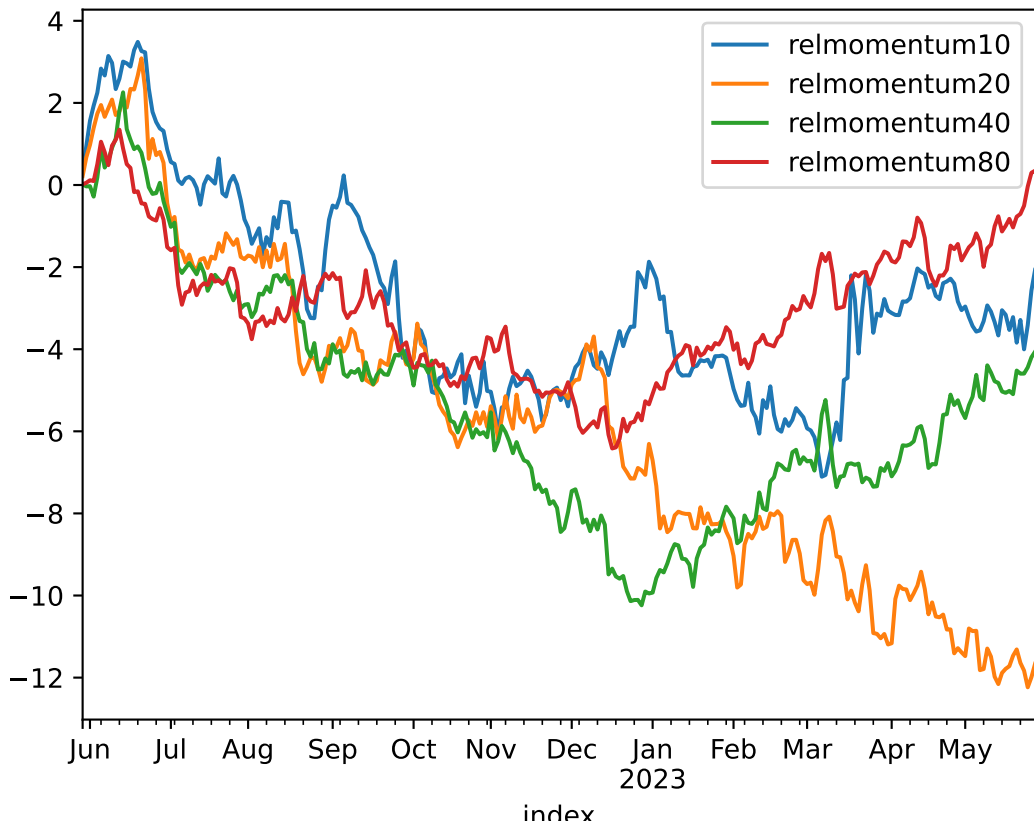


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -2.036, 'relmomentum20': -11.484, 'relmomentum40': -3.997, 'relmomentum80': 0.343}

ann. std {'relmomentum10': 7.308, 'relmomentum20': 6.338, 'relmomentum40': 5.275, 'relmomentum80': 4.602}

ann. SR {'relmomentum10': -0.28, 'relmomentum20': -1.81, 'relmomentum40': -0.76, 'relmomentum80': 0.07}

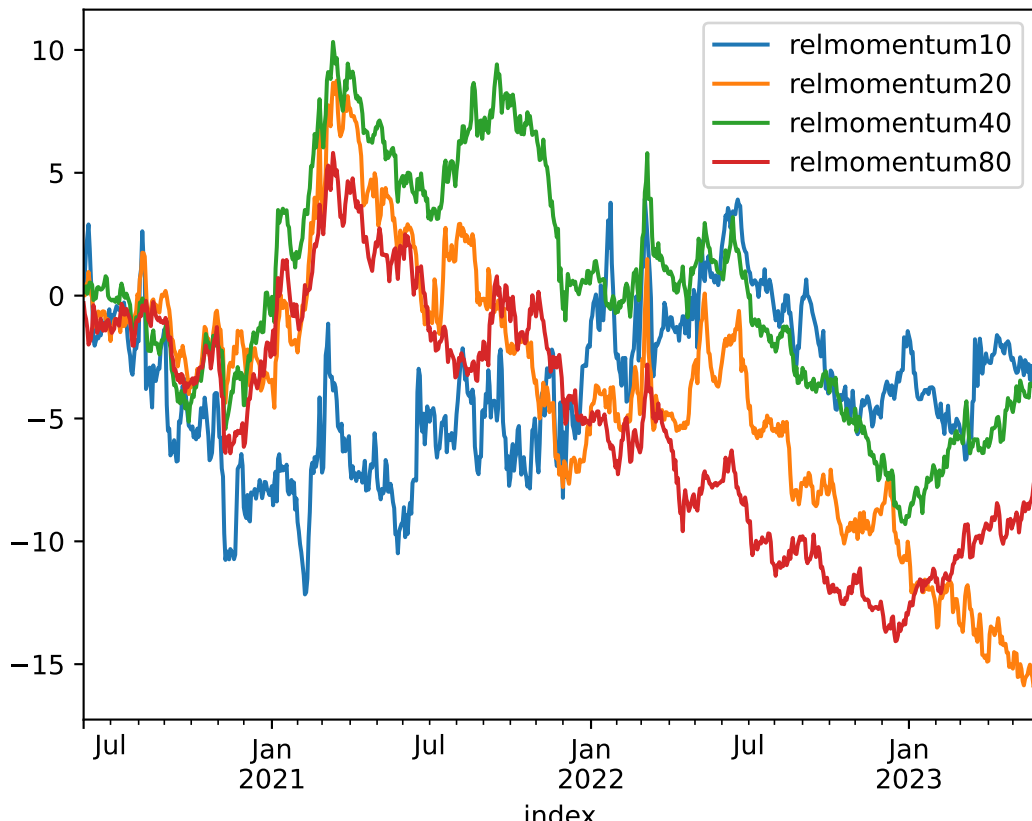


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.539, 'relmomentum20': -5.044, 'relmomentum40': -1.024, 'relmomentum80': -2.396}

ann. std {'relmomentum10': 11.962, 'relmomentum20': 8.388, 'relmomentum40': 6.983, 'relmomentum80': 6.323}

ann. SR {'relmomentum10': -0.05, 'relmomentum20': -0.6, 'relmomentum40': -0.15, 'relmomentum80': -0.38}

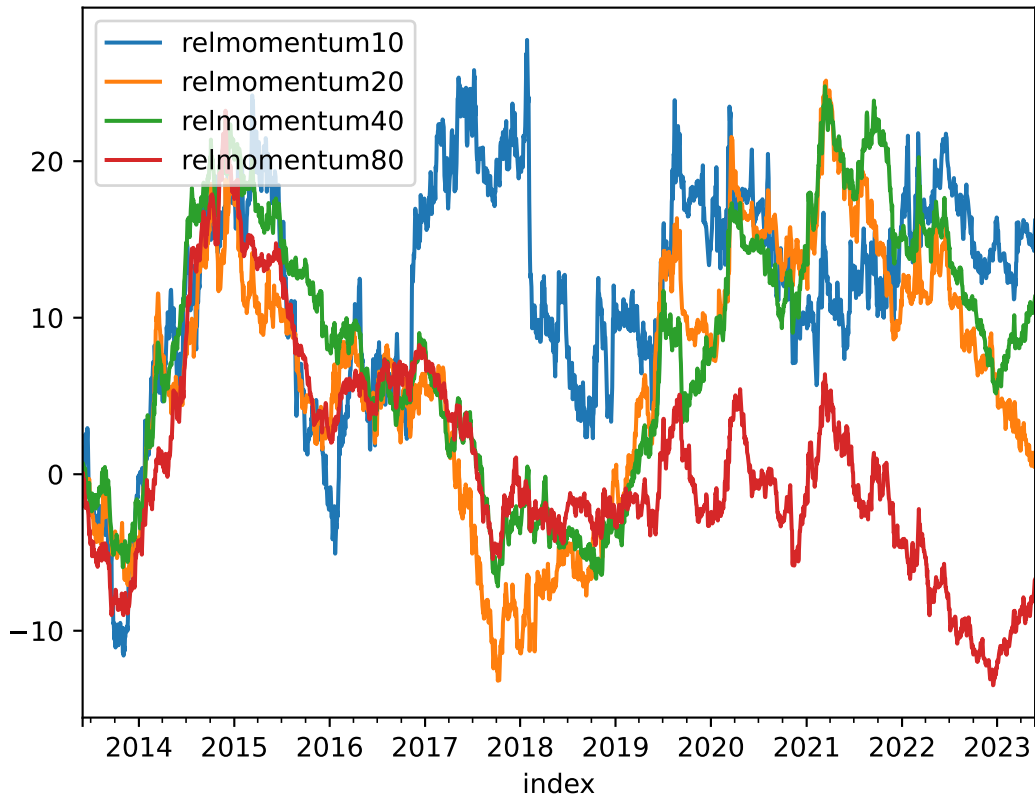


Total Trading Rule P&L for period '10Y'

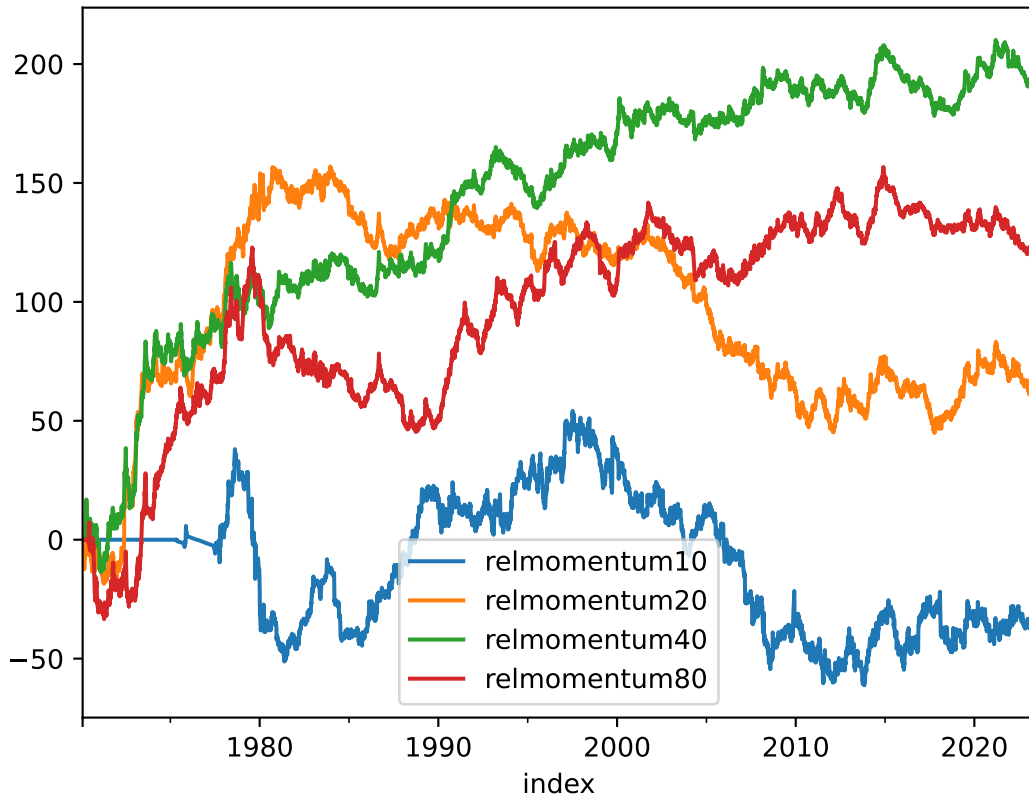
ann. mean {'relmomentum10': 1.591, 'relmomentum20': 0.101, 'relmomentum40': 1.114, 'relmomentum80': -0.66}

ann. std {'relmomentum10': 13.377, 'relmomentum20': 8.532, 'relmomentum40': 6.991, 'relmomentum80': 6.343}

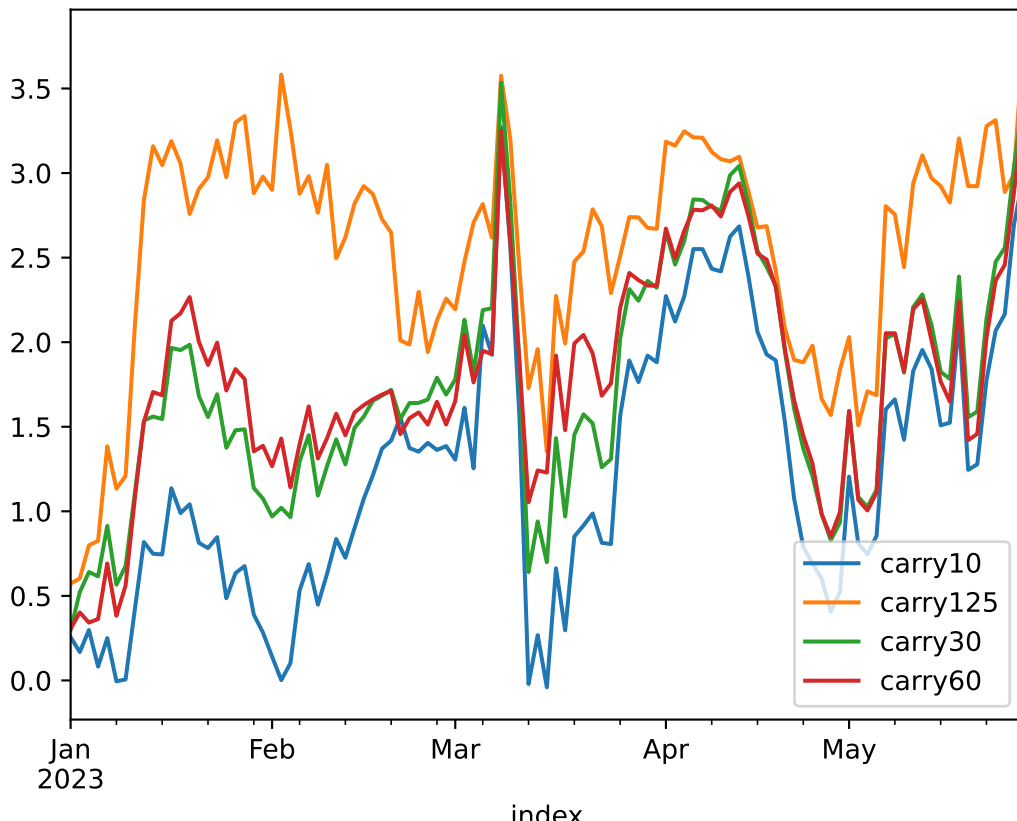
ann. SR {'relmomentum10': 0.12, 'relmomentum20': 0.01, 'relmomentum40': 0.16, 'relmomentum80': -0.1}



Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.615, 'relmomentum20': 1.088, 'relmomentum40': 3.621, 'relmomentum80': 2.333}
ann. std {'relmomentum10': 13.381, 'relmomentum20': 10.463, 'relmomentum40': 9.633, 'relmomentum80': 9.777}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 7.25, 'carry125': 9.205, 'carry30': 8.384, 'carry60': 8.147}
ann. std {'carry10': 6.011, 'carry125': 5.609, 'carry30': 5.684, 'carry60': 5.272}
ann. SR {'carry10': 1.21, 'carry125': 1.64, 'carry30': 1.47, 'carry60': 1.55}

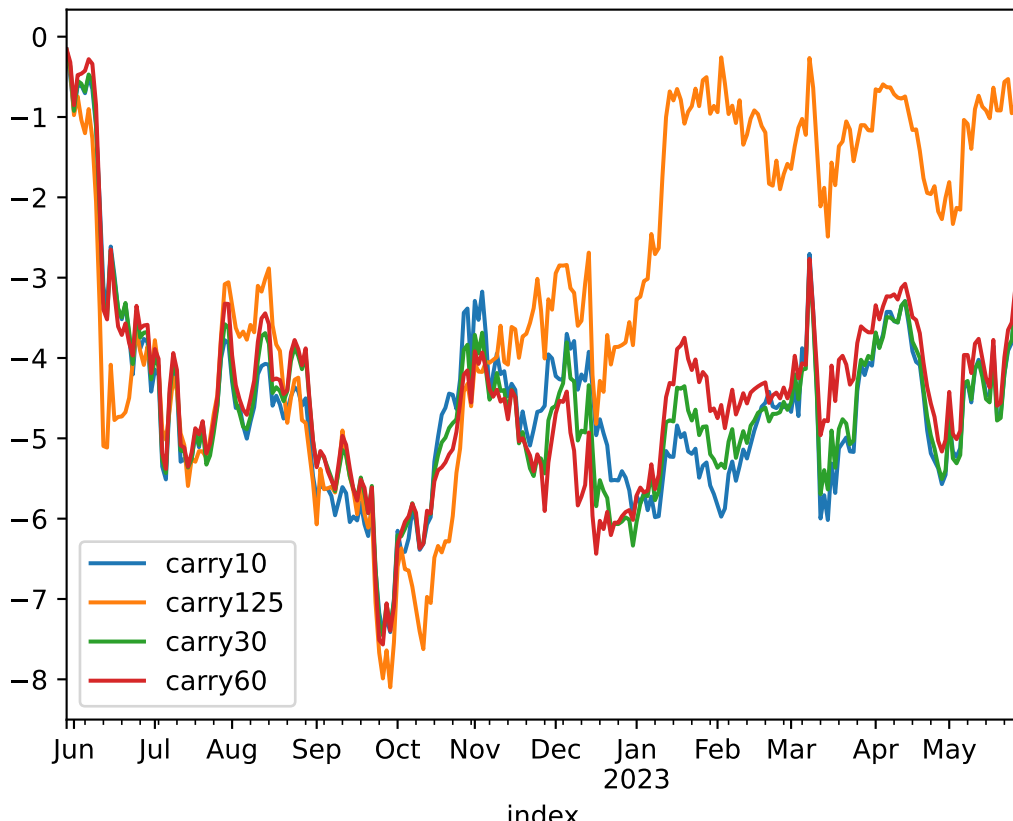


Total Trading Rule P&L for period '1Y'

ann. mean {'carry10': -2.956, 'carry125': -0.064, 'carry30': -2.853, 'carry60': -2.633}

ann. std {'carry10': 5.963, 'carry125': 6.366, 'carry30': 5.943, 'carry60': 5.885}

ann. SR {'carry10': -0.5, 'carry125': -0.01, 'carry30': -0.48, 'carry60': -0.45}

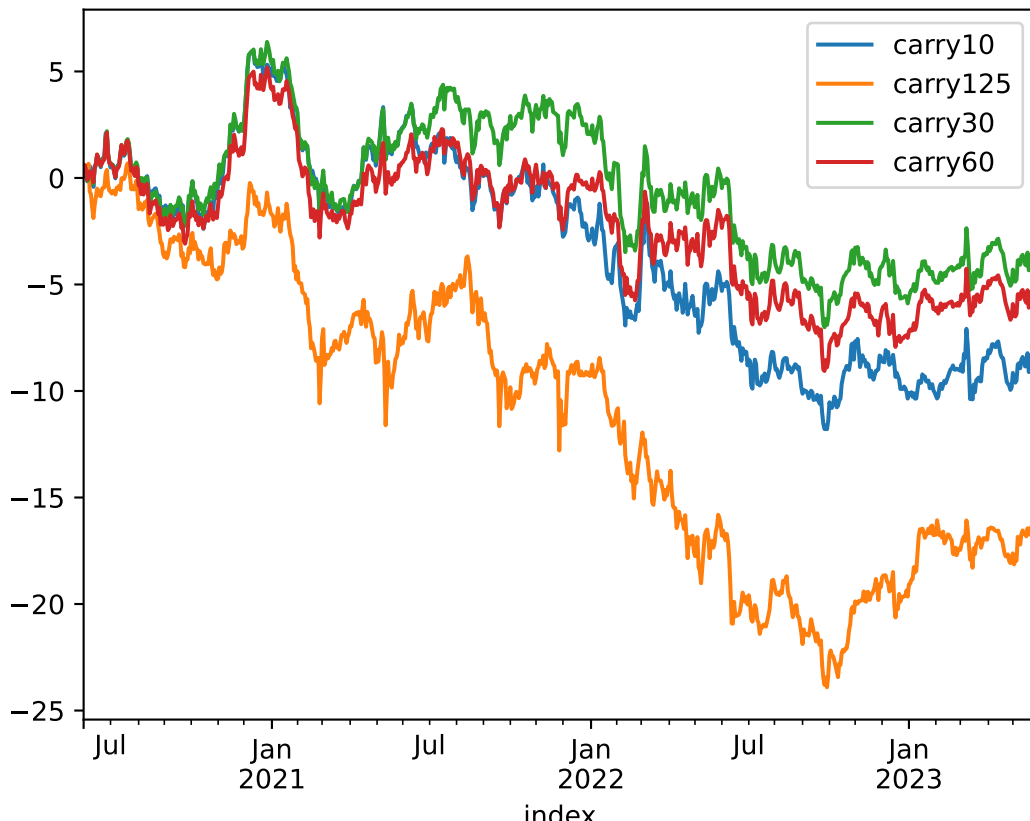


Total Trading Rule P&L for period '3Y'

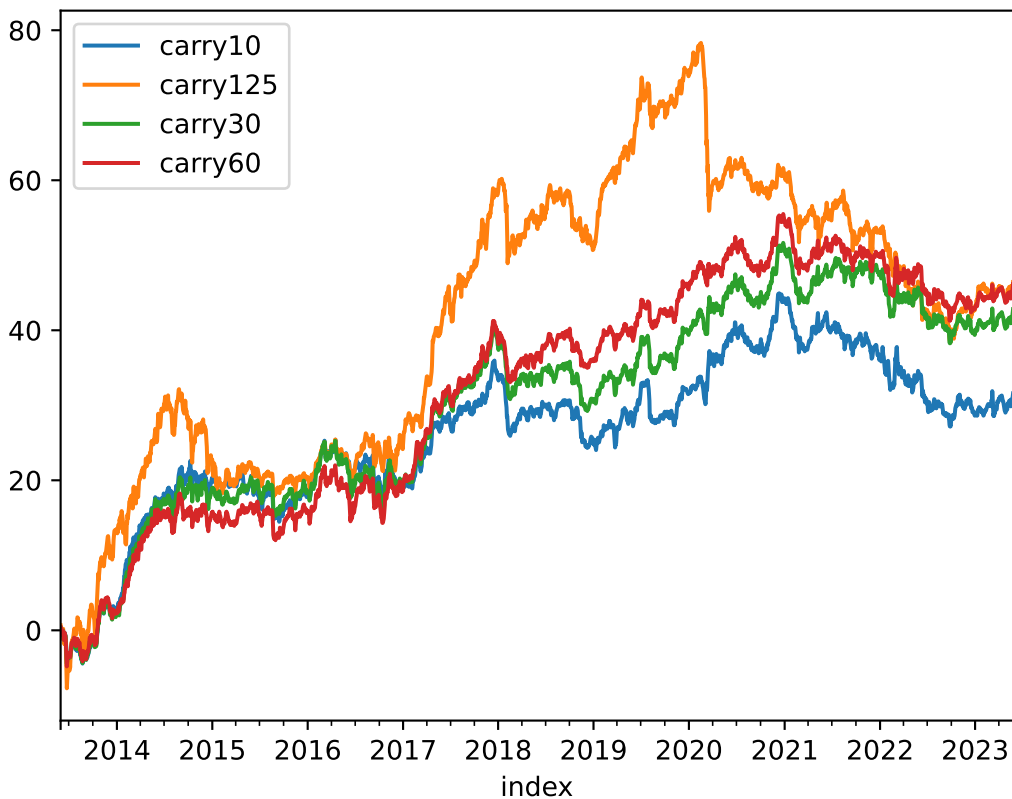
ann. mean {'carry10': -2.423, 'carry125': -5.21, 'carry30': -0.805, 'carry60': -1.368}

ann. std {'carry10': 6.559, 'carry125': 8.03, 'carry30': 6.496, 'carry60': 6.496}

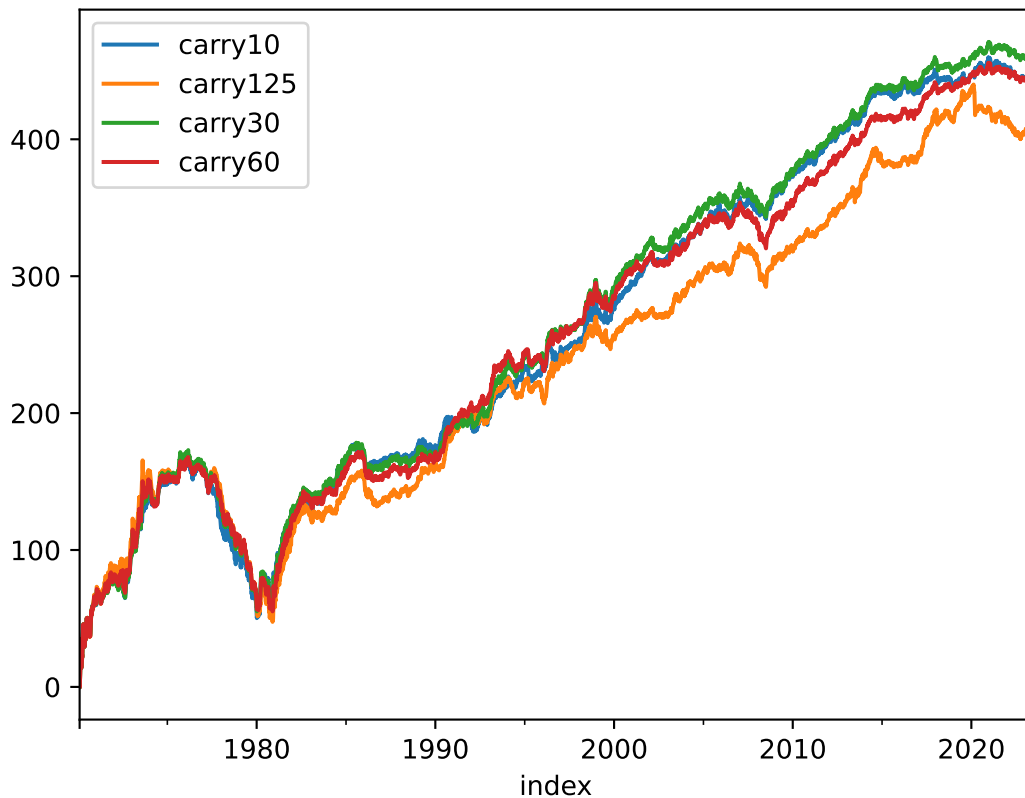
ann. SR {'carry10': -0.37, 'carry125': -0.65, 'carry30': -0.12, 'carry60': -0.21}



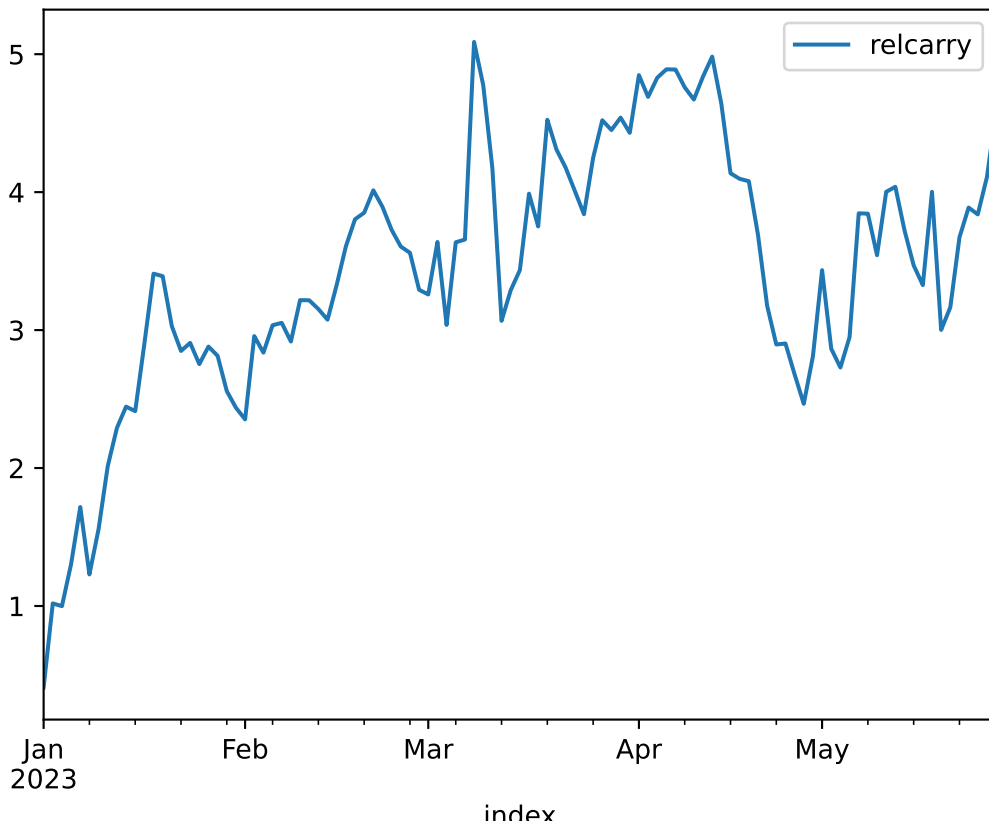
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.102, 'carry125': 4.56, 'carry30': 4.204, 'carry60': 4.532}
ann. std {'carry10': 6.378, 'carry125': 8.939, 'carry30': 6.463, 'carry60': 6.406}
ann. SR {'carry10': 0.49, 'carry125': 0.51, 'carry30': 0.65, 'carry60': 0.71}



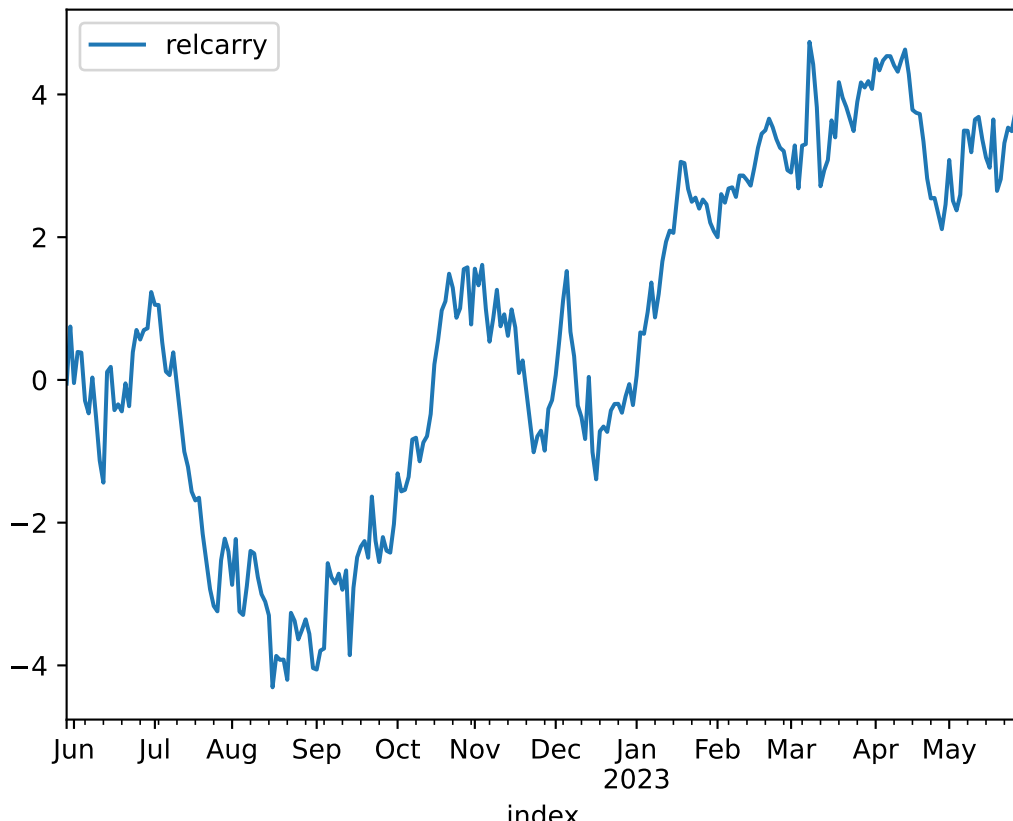
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.218, 'carry125': 7.512, 'carry30': 8.509, 'carry60': 8.22}
ann. std {'carry10': 11.195, 'carry125': 11.551, 'carry30': 11.252, 'carry60': 11.255}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



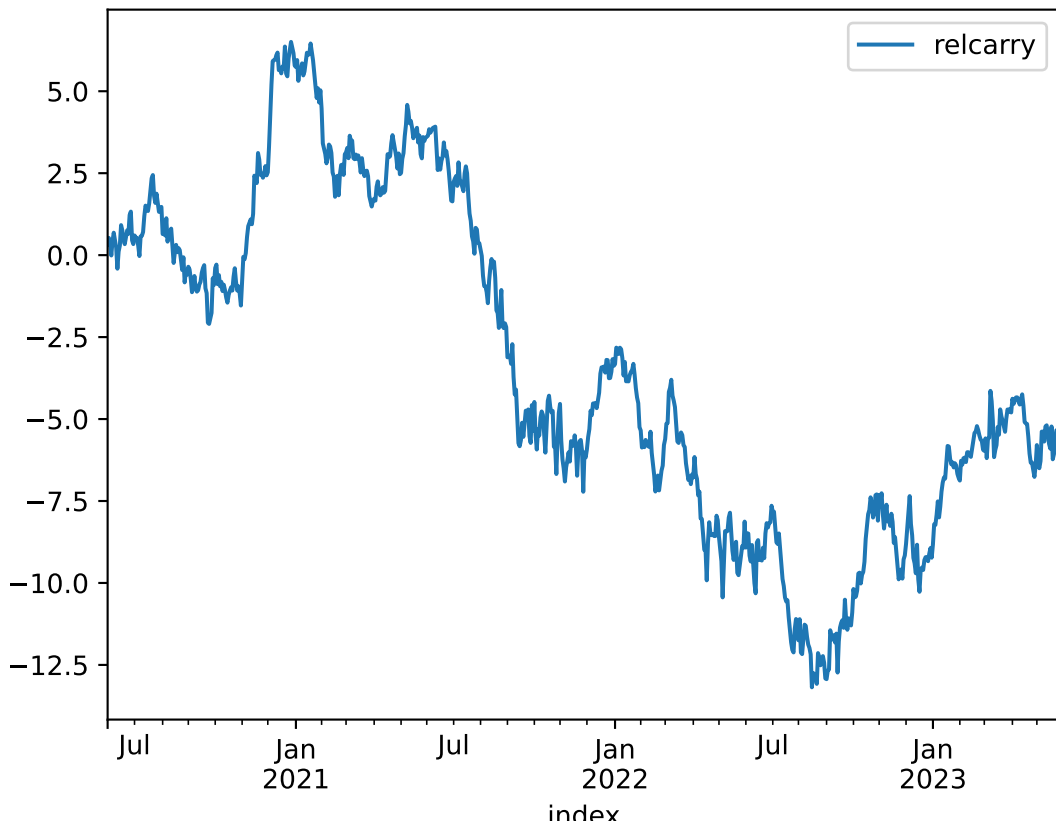
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 11.186}
ann. std {'relcarry': 5.975}
ann. SR {'relcarry': 1.87}



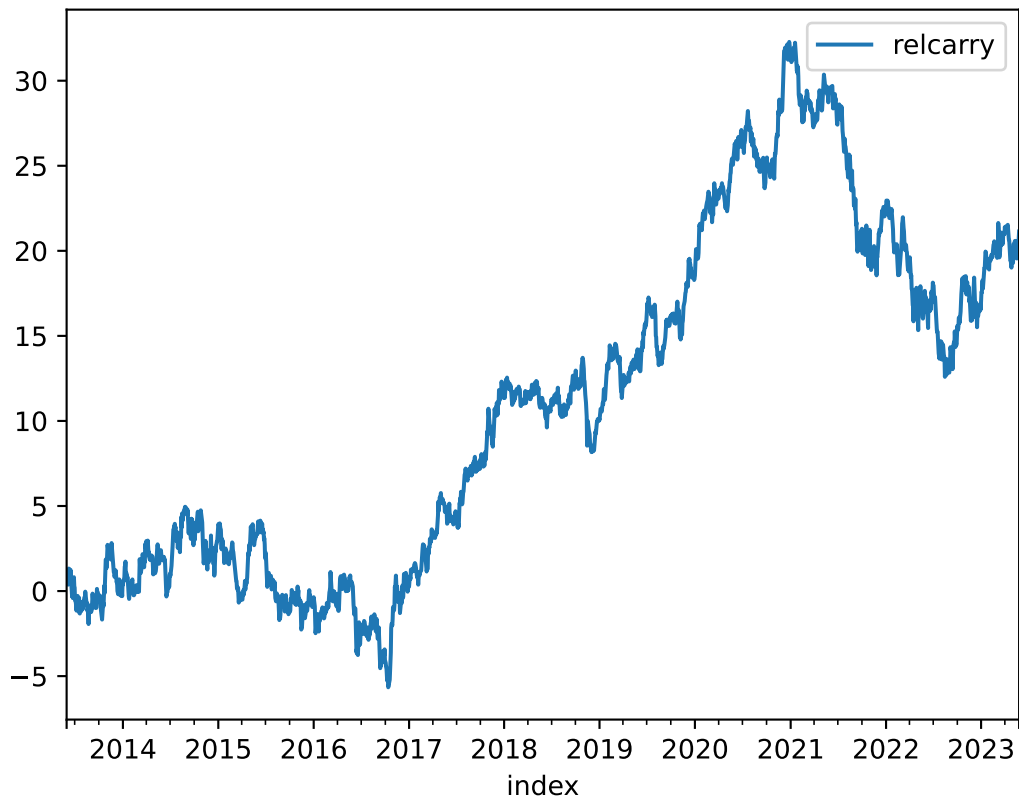
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 4.17}
ann. std {'relcarry': 6.811}
ann. SR {'relcarry': 0.61}



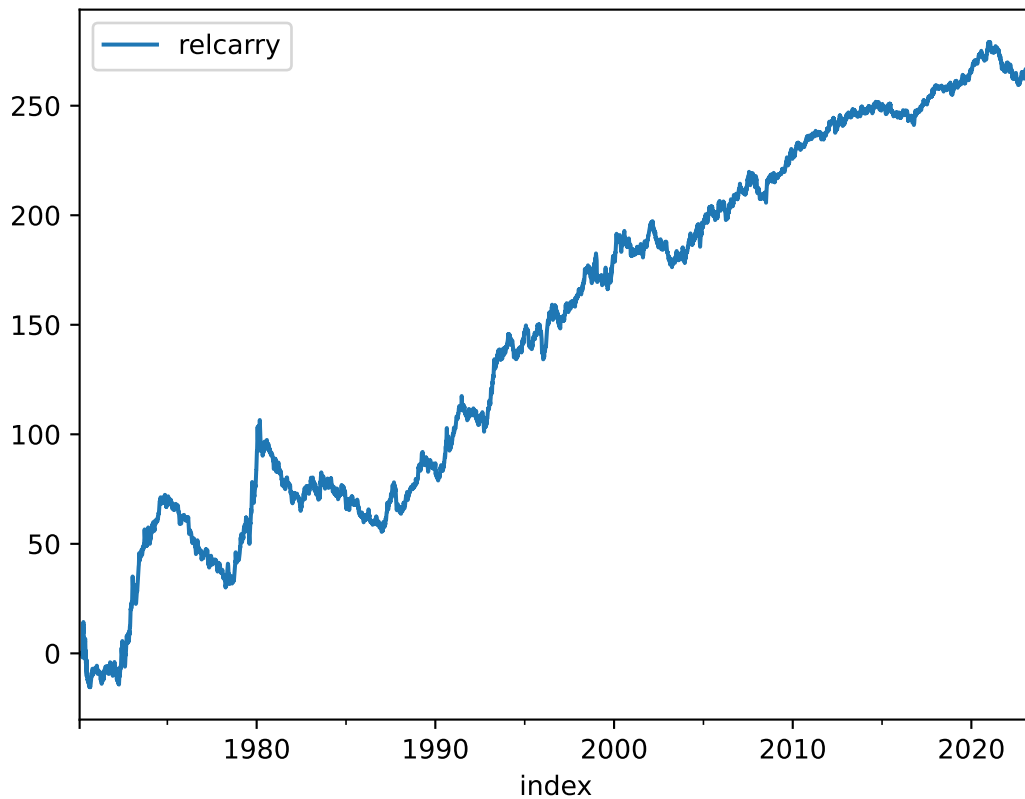
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.523}
ann. std {'relcarry': 6.725}
ann. SR {'relcarry': -0.23}



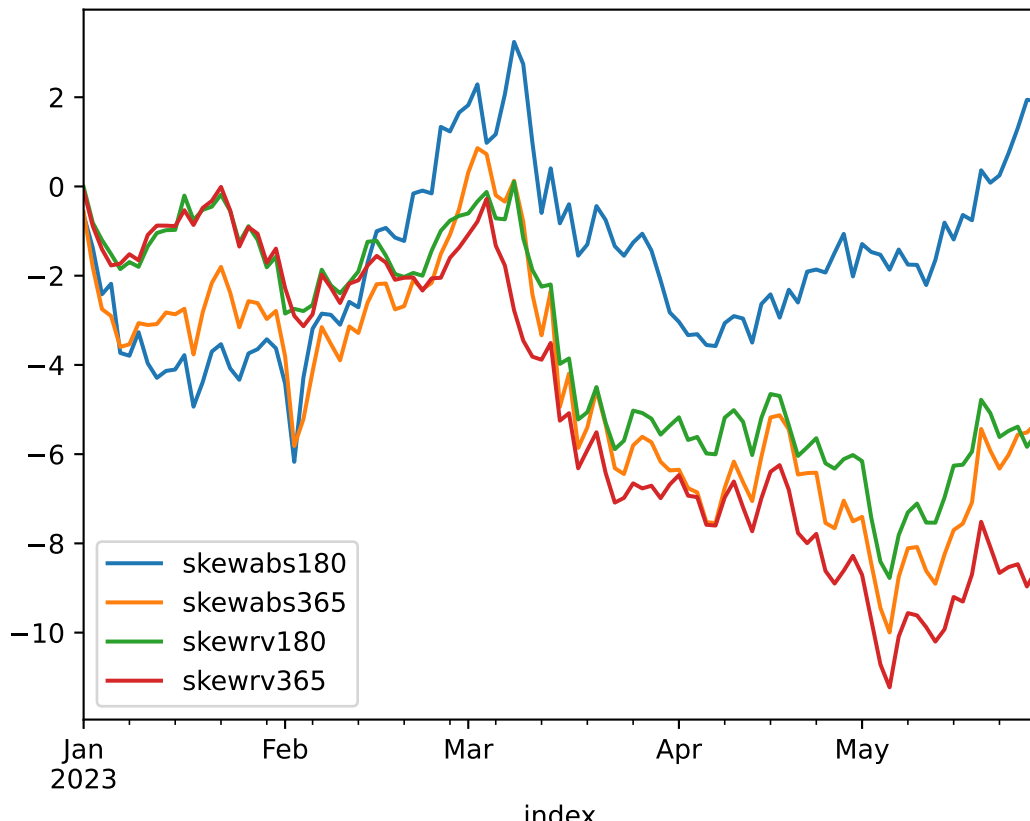
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.075}
ann. std {'relcarry': 5.832}
ann. SR {'relcarry': 0.36}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.932}
ann. std {'relcarry': 8.957}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 4.681, 'skewabs365': -12.936, 'skewrv180': -13.53, 'skewrv365': -20.982}
ann. std {'skewabs180': 10.879, 'skewabs365': 11.591, 'skewrv180': 8.442, 'skewrv365': 8.416}
ann. SR {'skewabs180': 0.43, 'skewabs365': -1.12, 'skewrv180': -1.6, 'skewrv365': -2.49}

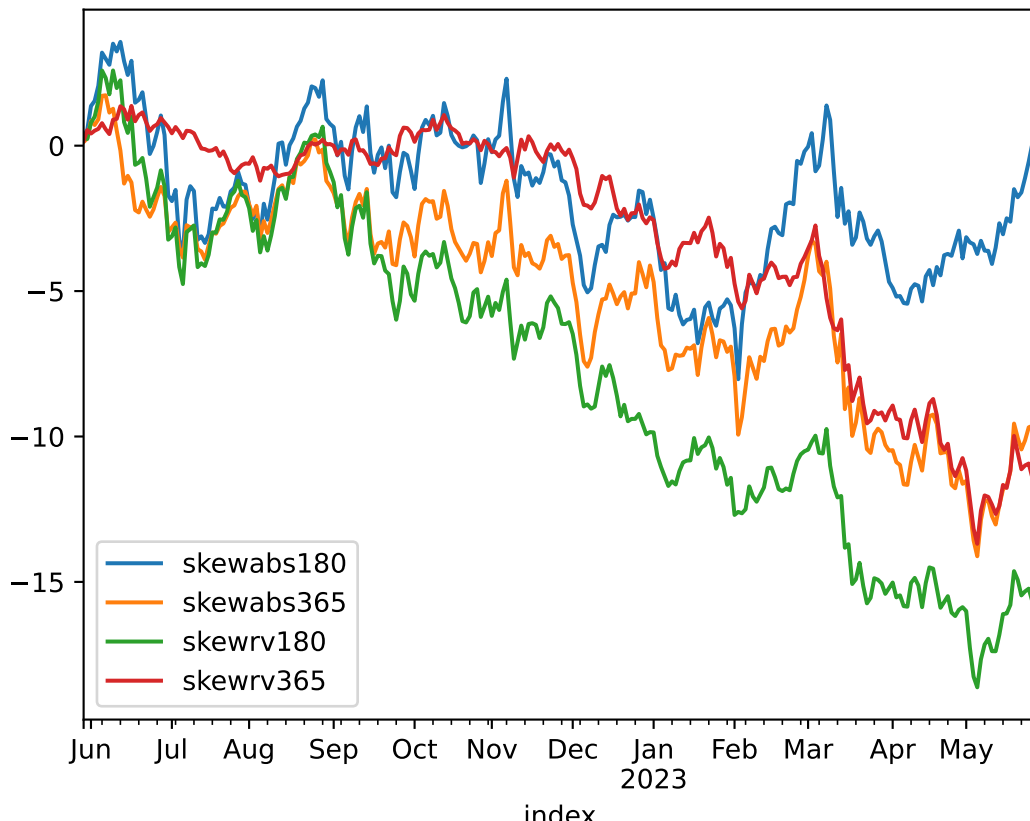


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': 0.061, 'skewabs365': -9.281, 'skewrv180': -15.161, 'skewrv365': -10.899}

ann. std {'skewabs180': 11.128, 'skewabs365': 10.17, 'skewrv180': 9.499, 'skewrv365': 6.317}

ann. SR {'skewabs180': 0.01, 'skewabs365': -0.91, 'skewrv180': -1.6, 'skewrv365': -1.73}

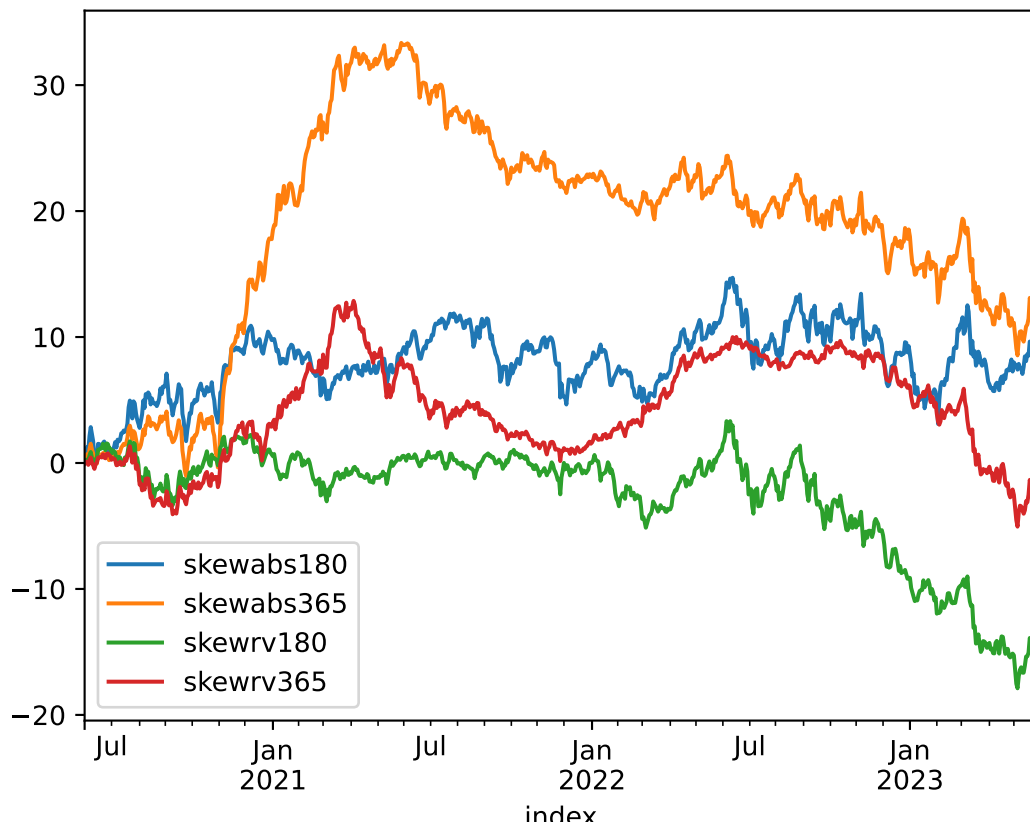


Total Trading Rule P&L for period '3Y'

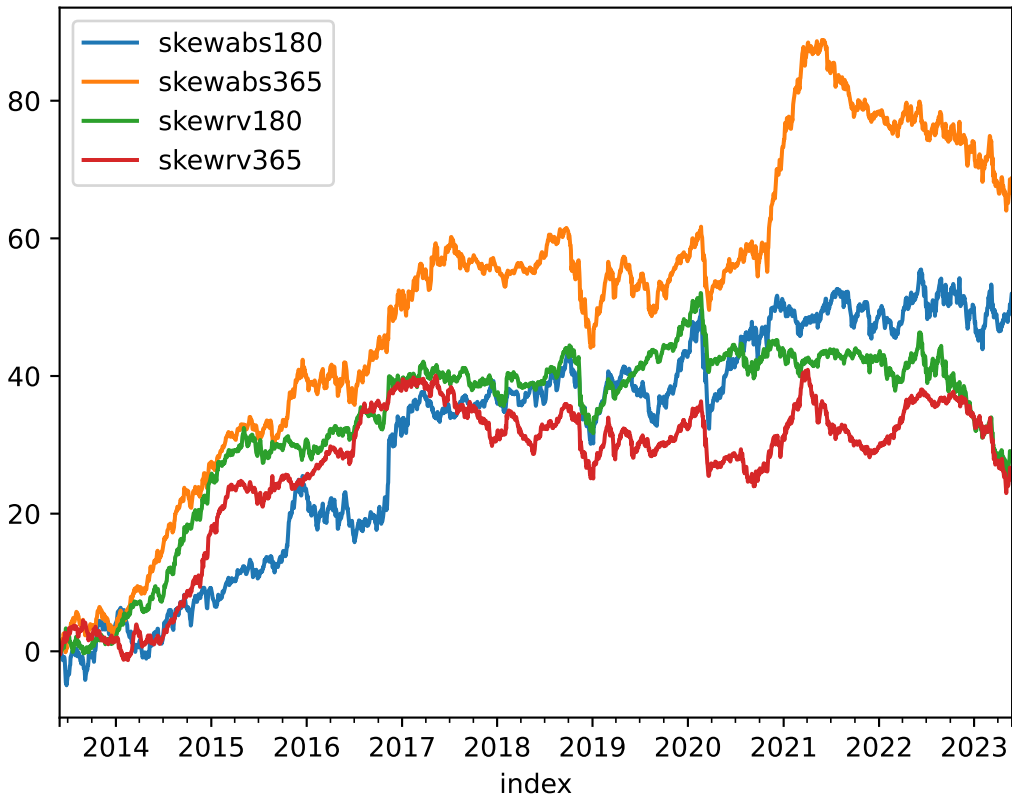
ann. mean {'skewabs180': 3.675, 'skewabs365': 4.344, 'skewrv180': -4.812, 'skewrv365': -0.798}

ann. std {'skewabs180': 9.174, 'skewabs365': 9.066, 'skewrv180': 7.396, 'skewrv365': 6.536}

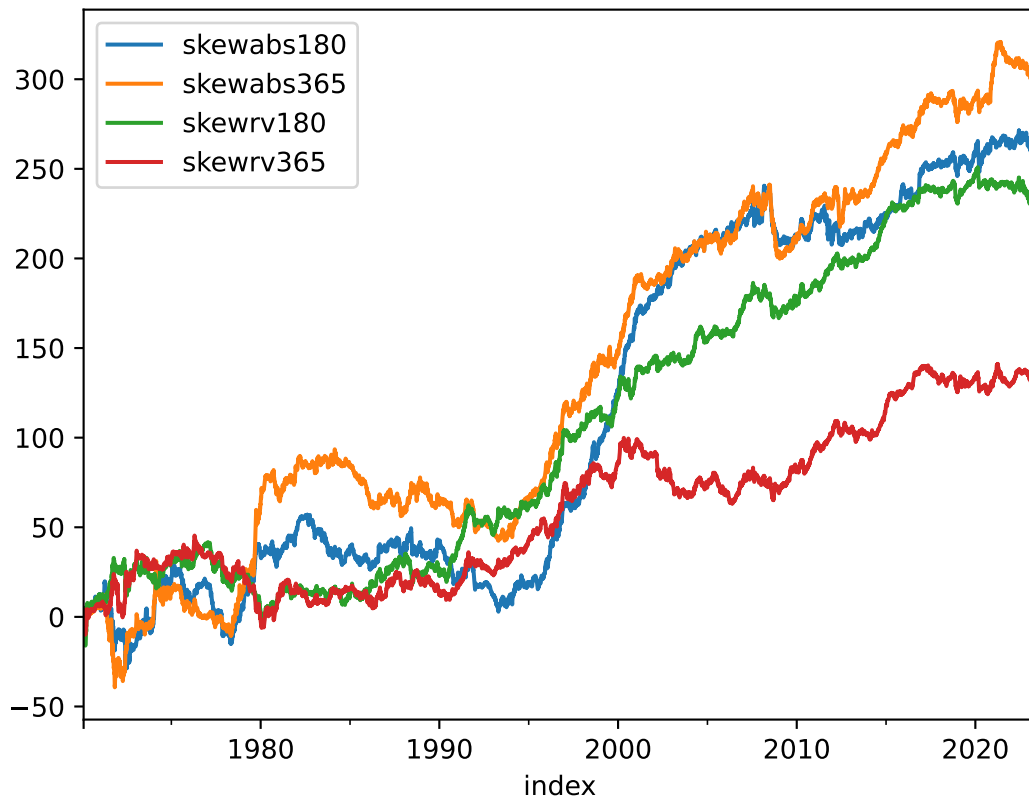
ann. SR {'skewabs180': 0.4, 'skewabs365': 0.48, 'skewrv180': -0.65, 'skewrv365': -0.12}



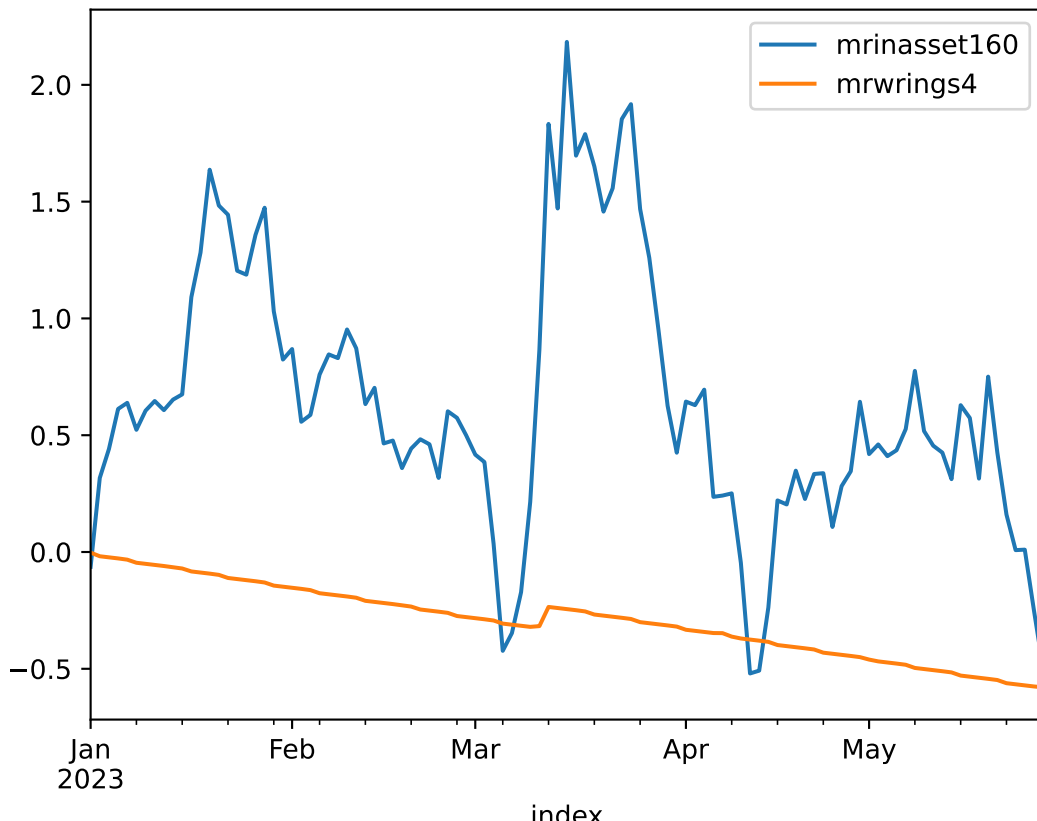
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.104, 'skewabs365': 6.748, 'skewrv180': 2.782, 'skewrv365': 2.514}
ann. std {'skewabs180': 8.04, 'skewabs365': 7.987, 'skewrv180': 6.436, 'skewrv365': 6.097}
ann. SR {'skewabs180': 0.63, 'skewabs365': 0.84, 'skewrv180': 0.43, 'skewrv365': 0.41}



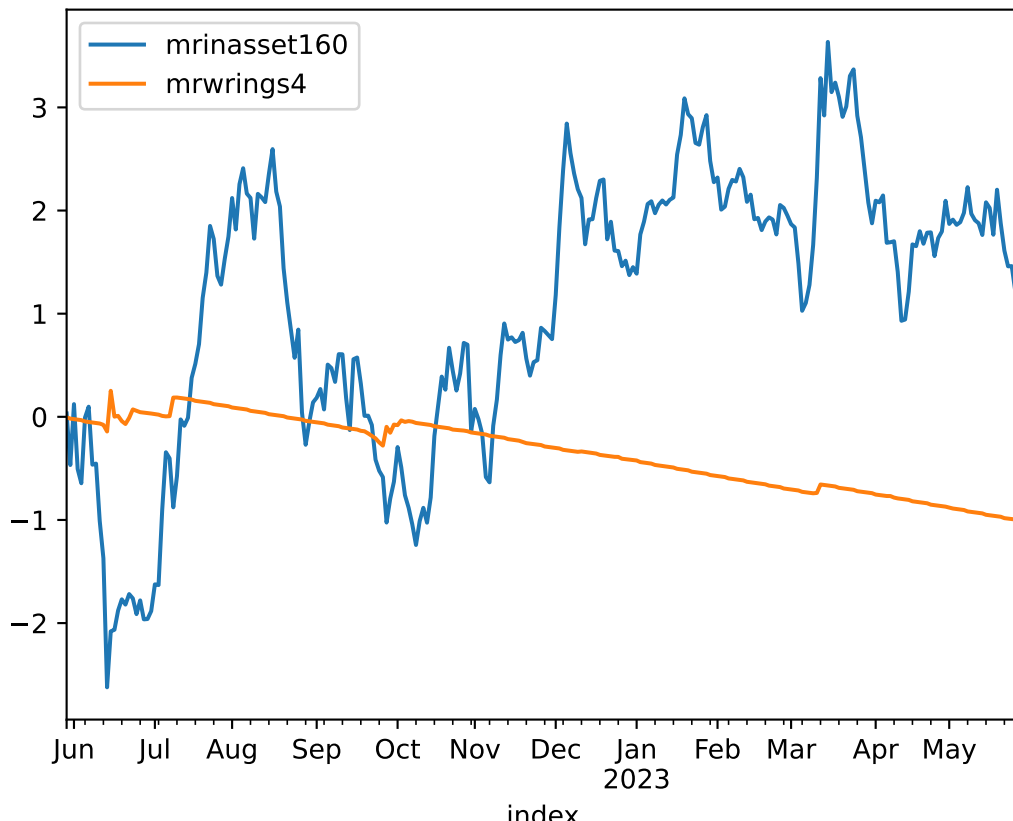
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.932, 'skewabs365': 5.535, 'skewrv180': 4.182, 'skewrv365': 2.317}
ann. std {'skewabs180': 10.098, 'skewabs365': 9.871, 'skewrv180': 8.752, 'skewrv365': 8.127}
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



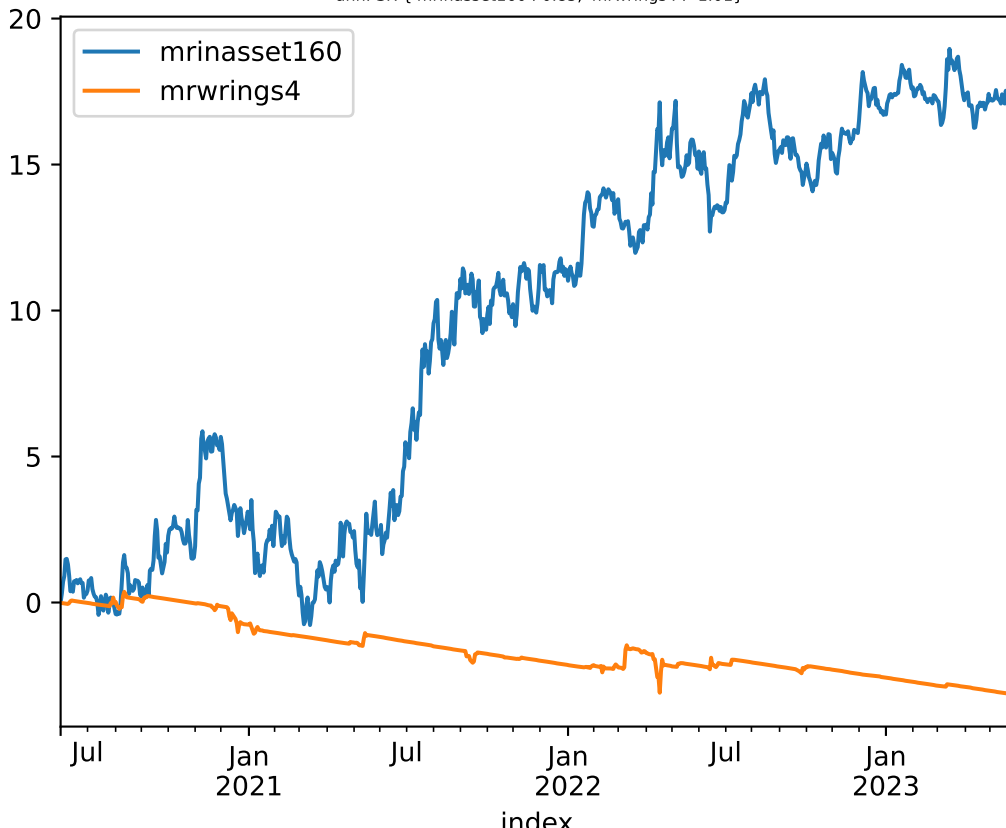
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -1.217, 'mrwrings4': -1.412}
ann. std {'mrinasset160': 4.069, 'mrwrings4': 0.15}
ann. SR {'mrinasset160': -0.3, 'mrwrings4': -9.43}



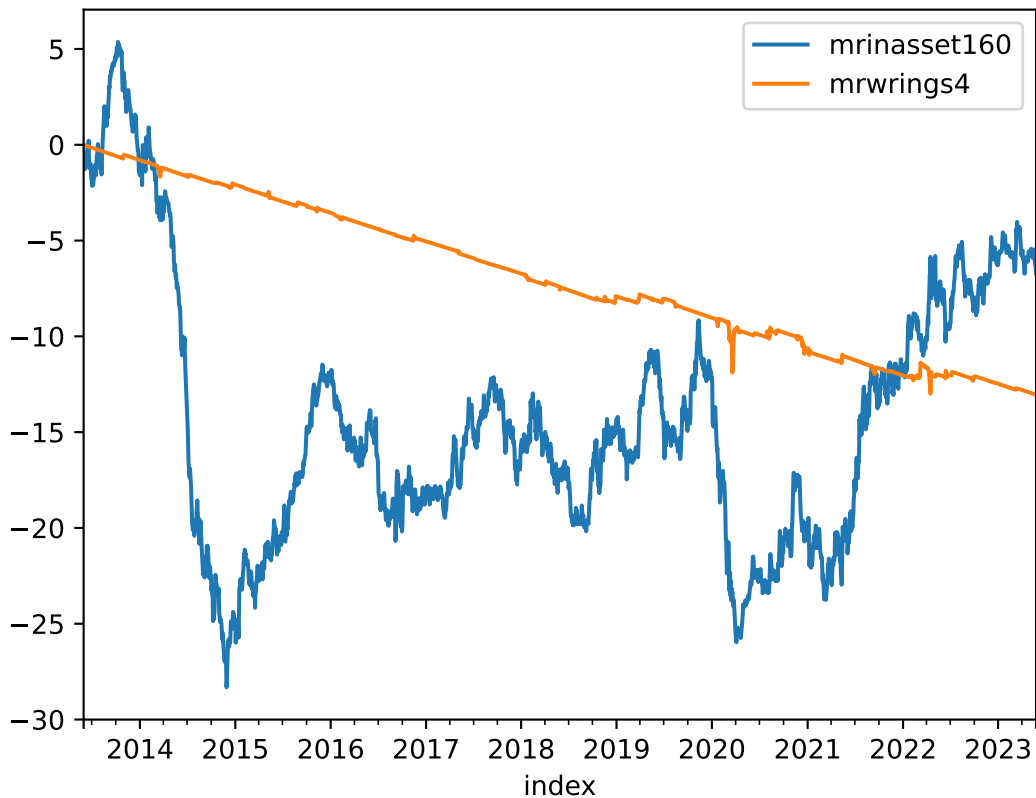
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 0.937, 'mrwrings4': -0.985}
ann. std {'mrinasset160': 4.773, 'mrwrings4': 0.574}
ann. SR {'mrinasset160': 0.2, 'mrwrings4': -1.71}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.342, 'mrwrings4': -1.032}
ann. std {'mrinasset160': 6.277, 'mrwrings4': 1.018}
ann. SR {'mrinasset160': 0.85, 'mrwrings4': -1.01}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.659, 'mrwrings4': -1.281}
ann. std {'mrinasset160': 6.18, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.11, 'mrwrings4': -1.46}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.585, 'mrwrings4': -2.19}
ann. std {'mrinasset160': 9.861, 'mrwrings4': 2.086}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.05}

