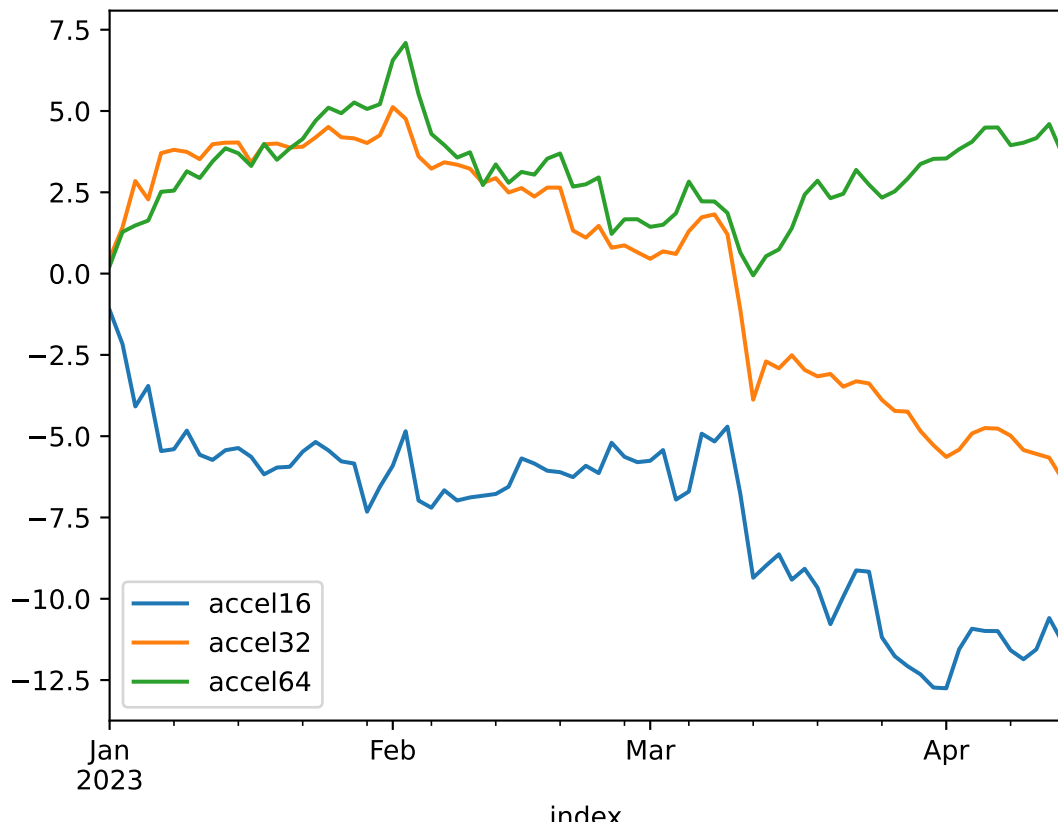
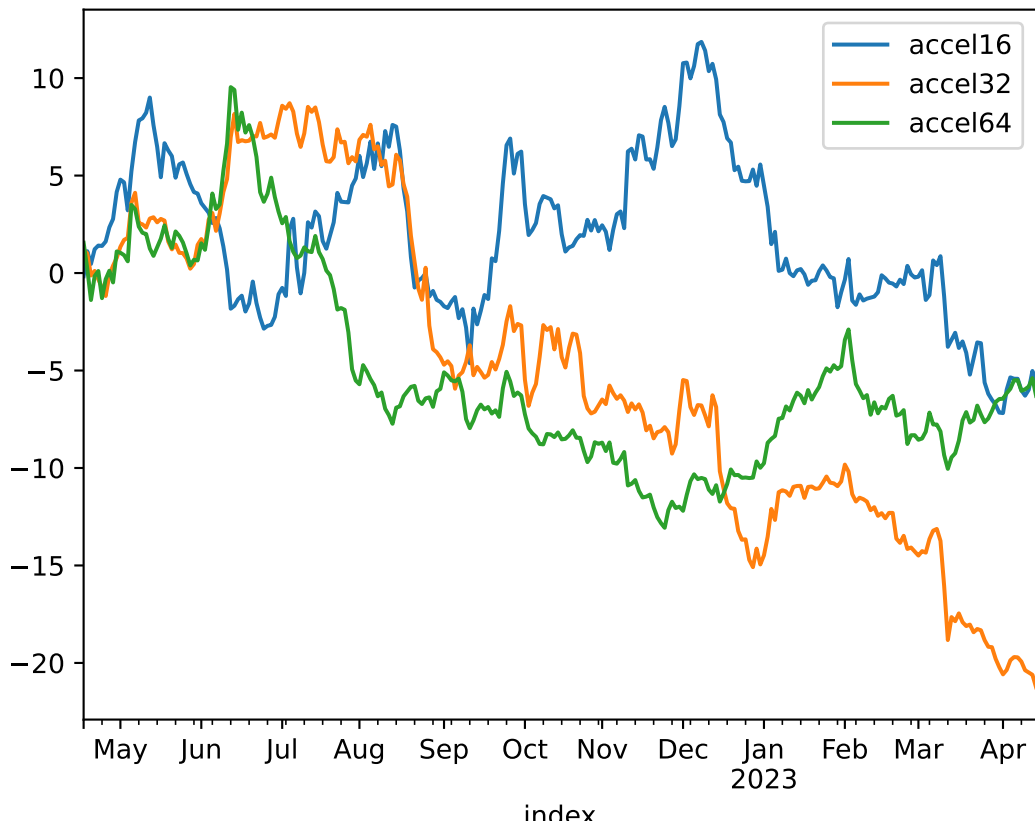


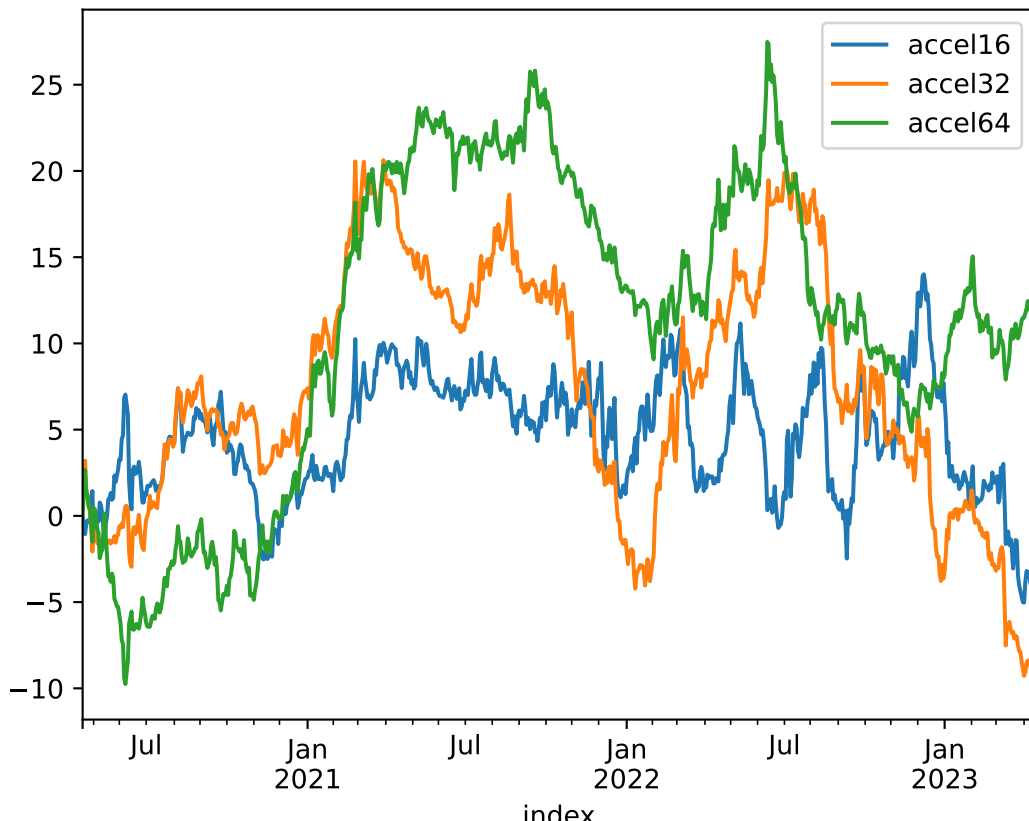
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -38.621, 'accel32': -21.513, 'accel64': 12.599}
ann. std {'accel16': 13.342, 'accel32': 10.197, 'accel64': 9.518}
ann. SR {'accel16': -2.89, 'accel32': -2.11, 'accel64': 1.32}



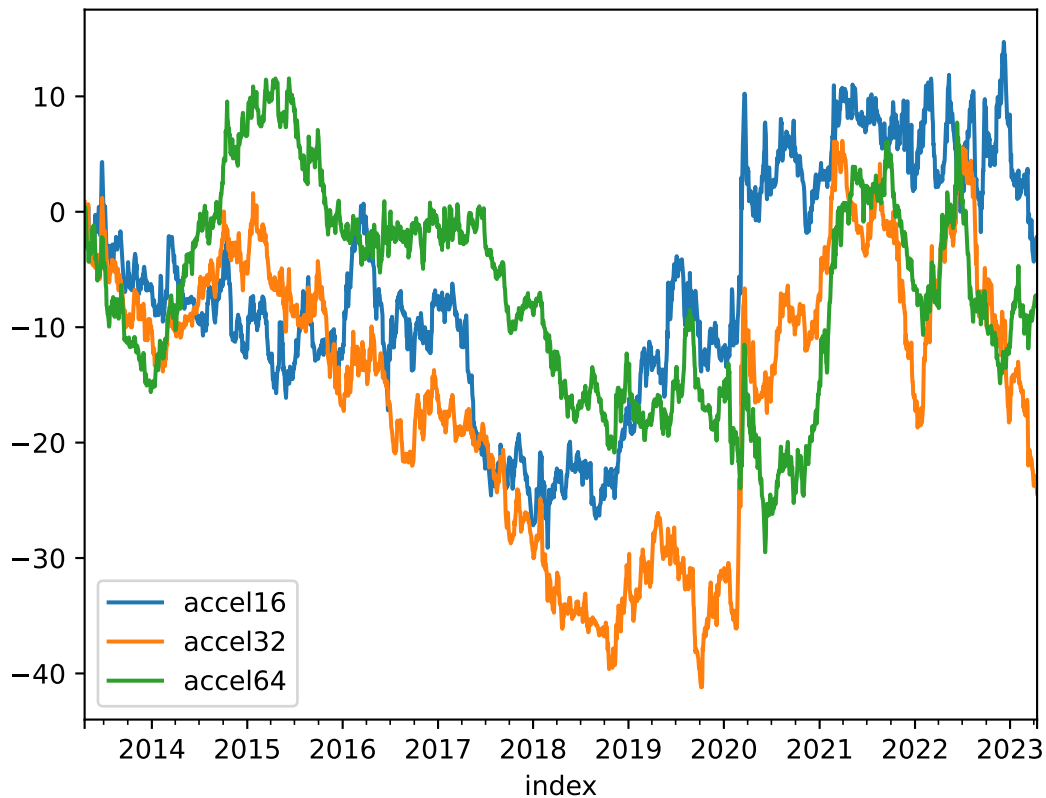
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -5.657, 'accel32': -20.923, 'accel64': -6.201}
ann. std {'accel16': 16.091, 'accel32': 13.097, 'accel64': 11.193}
ann. SR {'accel16': -0.35, 'accel32': -1.6, 'accel64': -0.55}



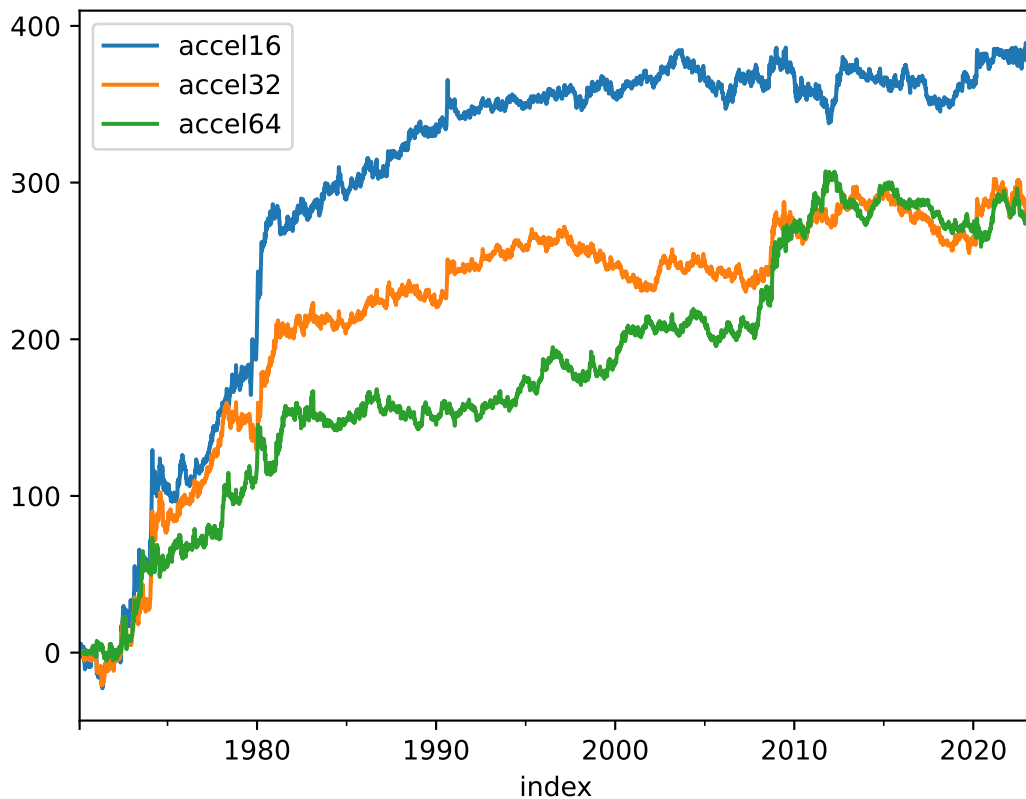
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -1.179, 'accel32': -3.262, 'accel64': 3.823}
ann. std {'accel16': 13.65, 'accel32': 11.861, 'accel64': 10.69}
ann. SR {'accel16': -0.09, 'accel32': -0.28, 'accel64': 0.36}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.283, 'accel32': -2.398, 'accel64': -0.795}
ann. std {'accel16': 11.711, 'accel32': 10.689, 'accel64': 9.336}
ann. SR {'accel16': -0.02, 'accel32': -0.22, 'accel64': -0.09}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.853, 'accel32': 5.014, 'accel64': 5.173}
ann. std {'accel16': 14.132, 'accel32': 12.455, 'accel64': 12.105}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

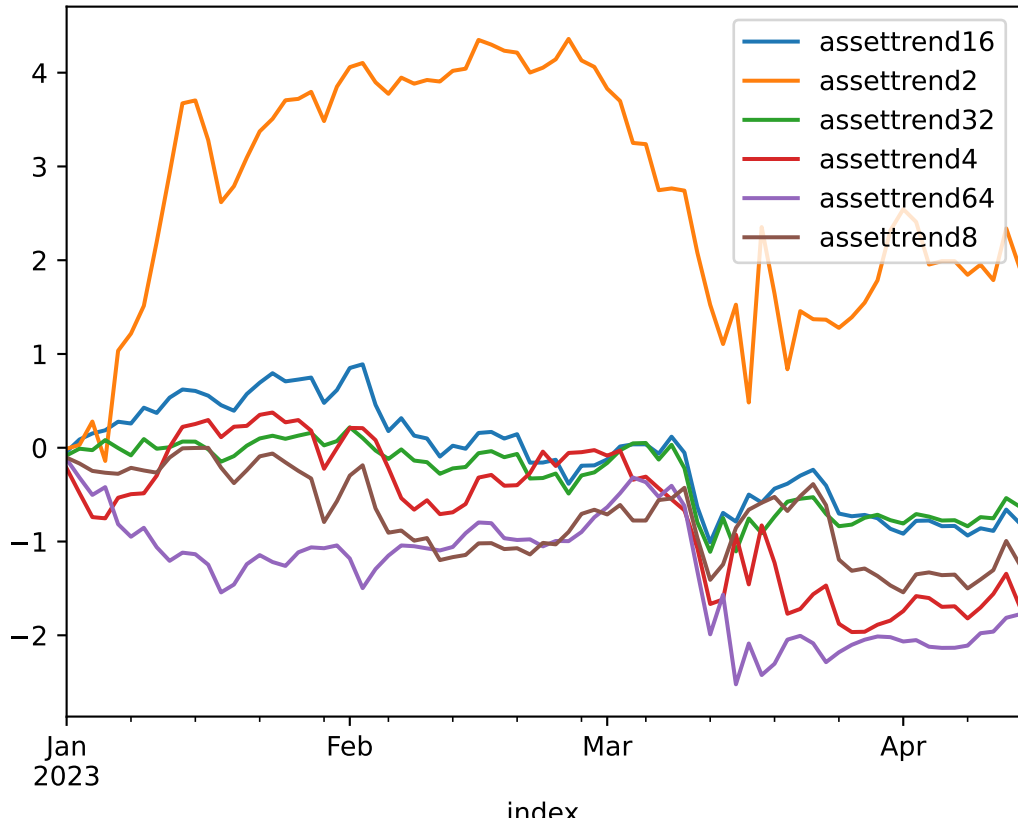


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -2.725, 'assetrend2': 6.615, 'assetrend32': -2.128, 'assetrend4': -5.714, 'assetrend64': -6.069, 'assetrend8': -4.209}

ann. std {'assetrend16': 2.613, 'assetrend2': 6.887, 'assetrend32': 2.367, 'assetrend4': 3.687, 'assetrend64': 3.472, 'assetrend8': 2.946}

ann. SR {'assetrend16': -1.04, 'assetrend2': 0.96, 'assetrend32': -0.9, 'assetrend4': -1.55, 'assetrend64': -1.75, 'assetrend8': -1.43}

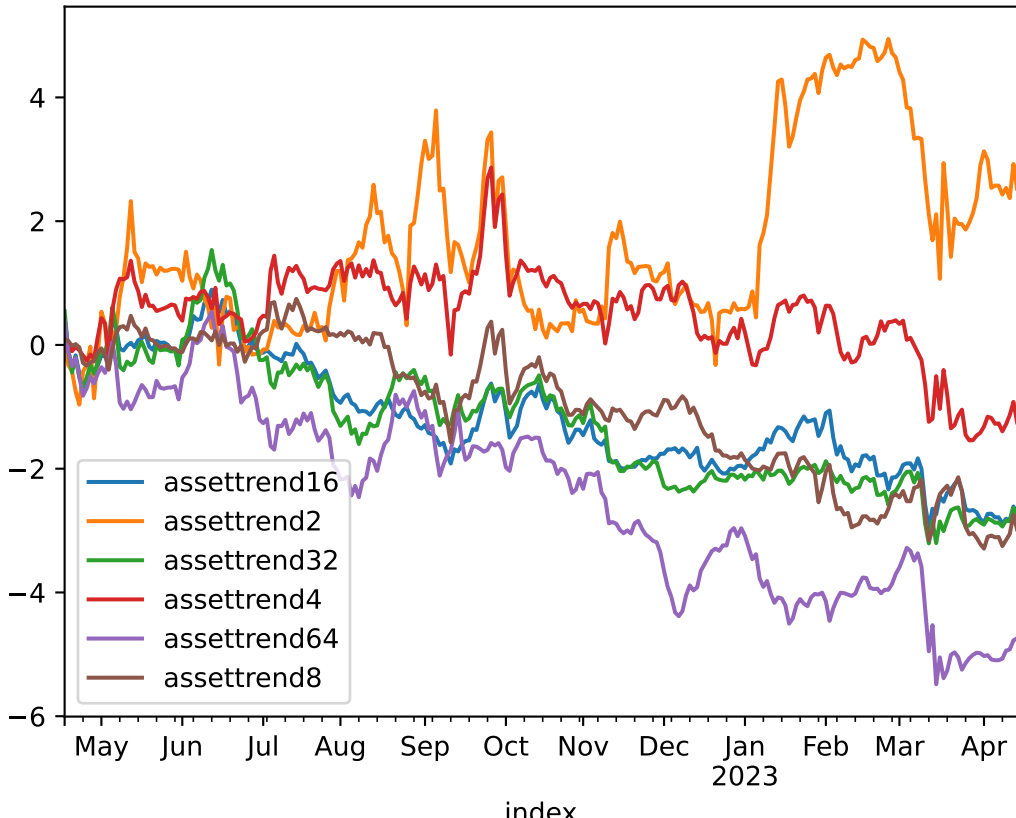


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -2.706, 'assettrend2': 2.484, 'assettrend32': -2.679, 'assettrend4': -1.232, 'assettrend64': -4.666, 'assettrend8': -2.937}

ann. std {'assettrend16': 2.44, 'assettrend2': 6.442, 'assettrend32': 2.807, 'assettrend4': 3.958, 'assettrend64': 3.236, 'assettrend8': 2.644}

ann. SR {'assettrend16': -1.11, 'assettrend2': 0.39, 'assettrend32': -0.95, 'assettrend4': -0.31, 'assettrend64': -1.44, 'assettrend8': -1.11}

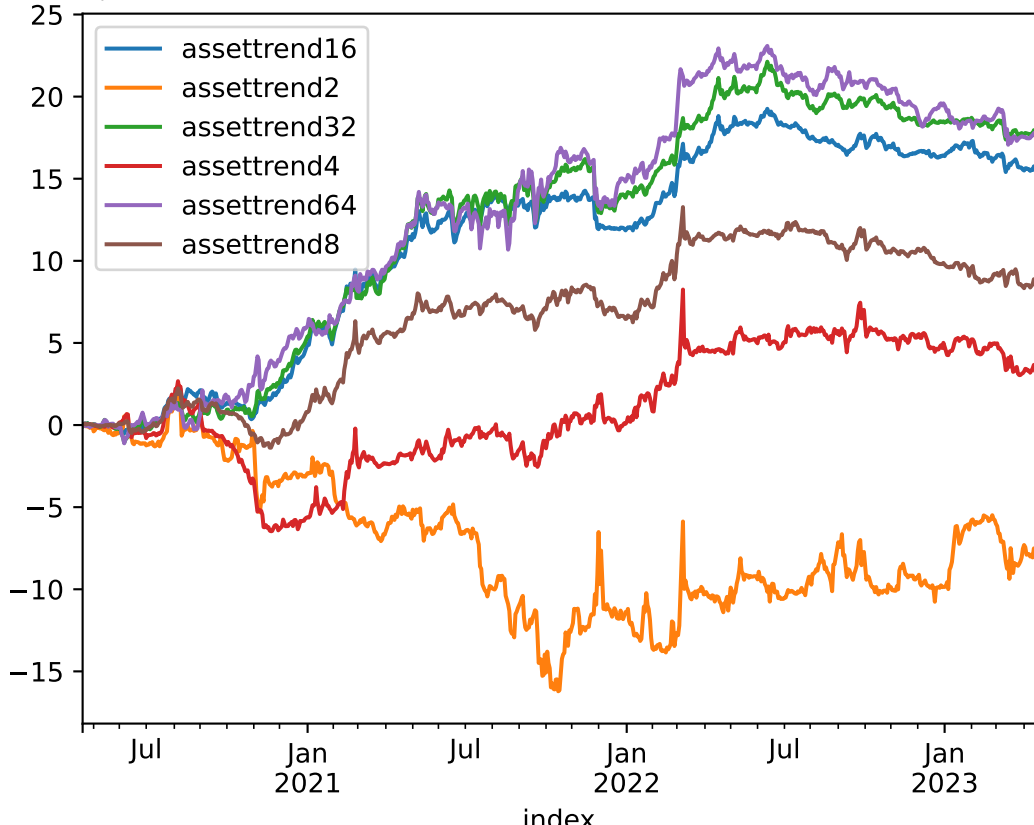


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.125, 'assettrend2': -2.597, 'assettrend32': 5.865, 'assettrend4': 1.094, 'assettrend64': 5.846, 'assettrend8': 2.836}

ann. std {'assettrend16': 3.407, 'assettrend2': 7.806, 'assettrend32': 4.124, 'assettrend4': 4.94, 'assettrend64': 4.999, 'assettrend8': 3.513}

ann. SR {'assettrend16': 1.5, 'assettrend2': -0.33, 'assettrend32': 1.42, 'assettrend4': 0.22, 'assettrend64': 1.17, 'assettrend8': 0.81}

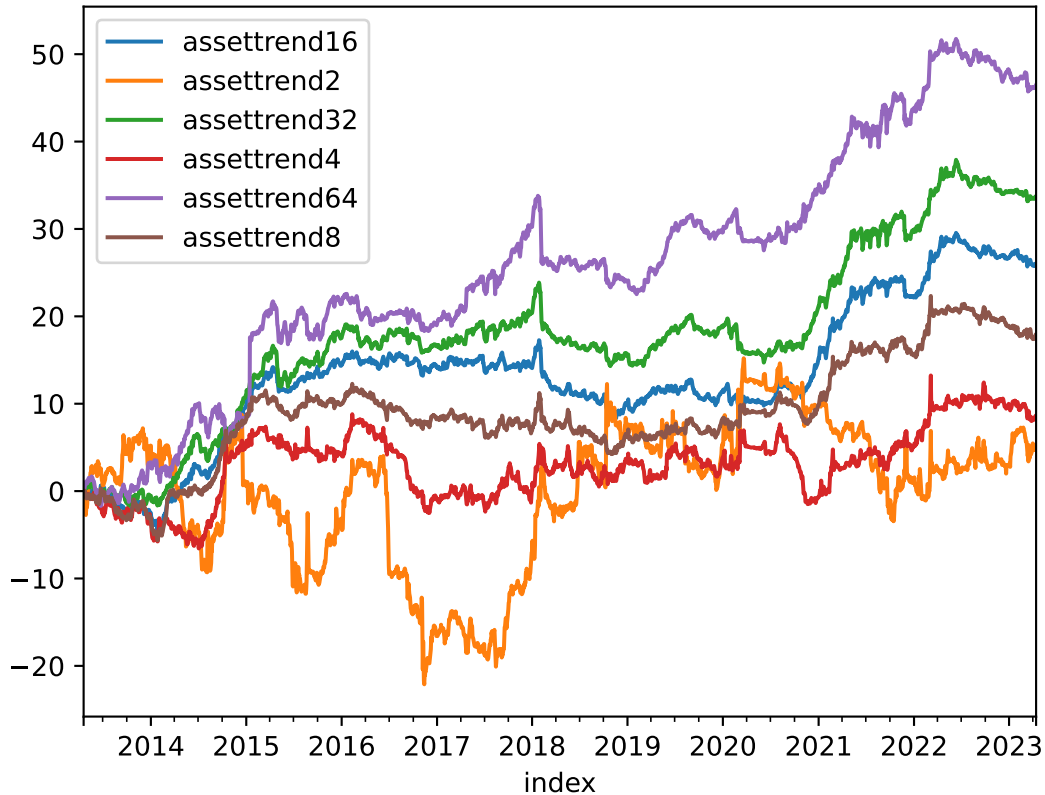


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.544, 'assettrend2': 0.477, 'assettrend32': 3.305, 'assettrend4': 0.816, 'assettrend64': 4.564, 'assettrend8': 1.738}

ann. std {'assettrend16': 3.153, 'assettrend2': 9.792, 'assettrend32': 3.591, 'assettrend4': 4.972, 'assettrend64': 5.193, 'assettrend8': 3.453}

ann. SR {'assettrend16': 0.81, 'assettrend2': 0.05, 'assettrend32': 0.92, 'assettrend4': 0.16, 'assettrend64': 0.88, 'assettrend8': 0.5}

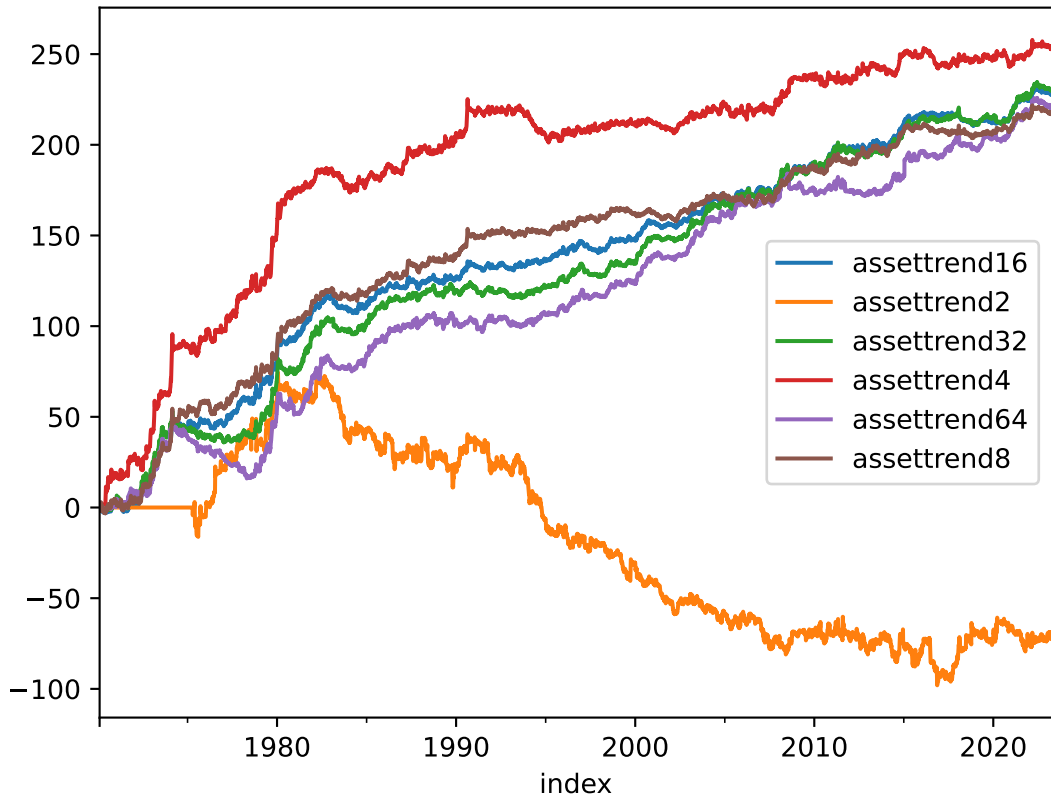


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.204, 'assettrend2': -1.311, 'assettrend32': 4.249, 'assettrend4': 4.665, 'assettrend8': 4.068, 'assettrend8': 4.004}

ann. std {'assettrend16': 4.304, 'assettrend2': 10.262, 'assettrend32': 4.496, 'assettrend4': 6.548, 'assettrend64': 4.996, 'assettrend8': 4.634}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.95, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

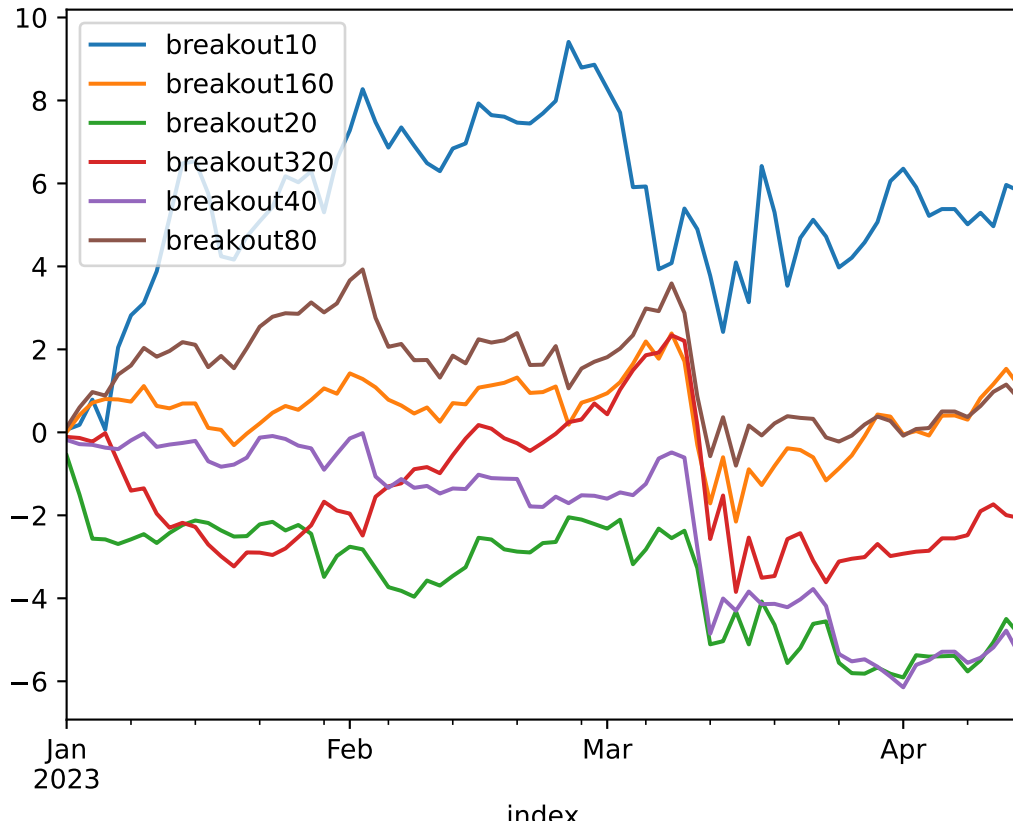


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 19.856, 'breakout160': 3.814, 'breakout20': -16.619, 'breakout320': -7.046, 'breakout40': -18.249, 'breakout80': 2.749}

ann. std {'breakout10': 14.453, 'breakout160': 8.174, 'breakout20': 7.786, 'breakout320': 10.018, 'breakout40': 7.53, 'breakout80': 8.221}

ann. SR {'breakout10': 1.37, 'breakout160': 0.47, 'breakout20': -2.13, 'breakout320': -0.7, 'breakout40': -2.42, 'breakout80': 0.33}

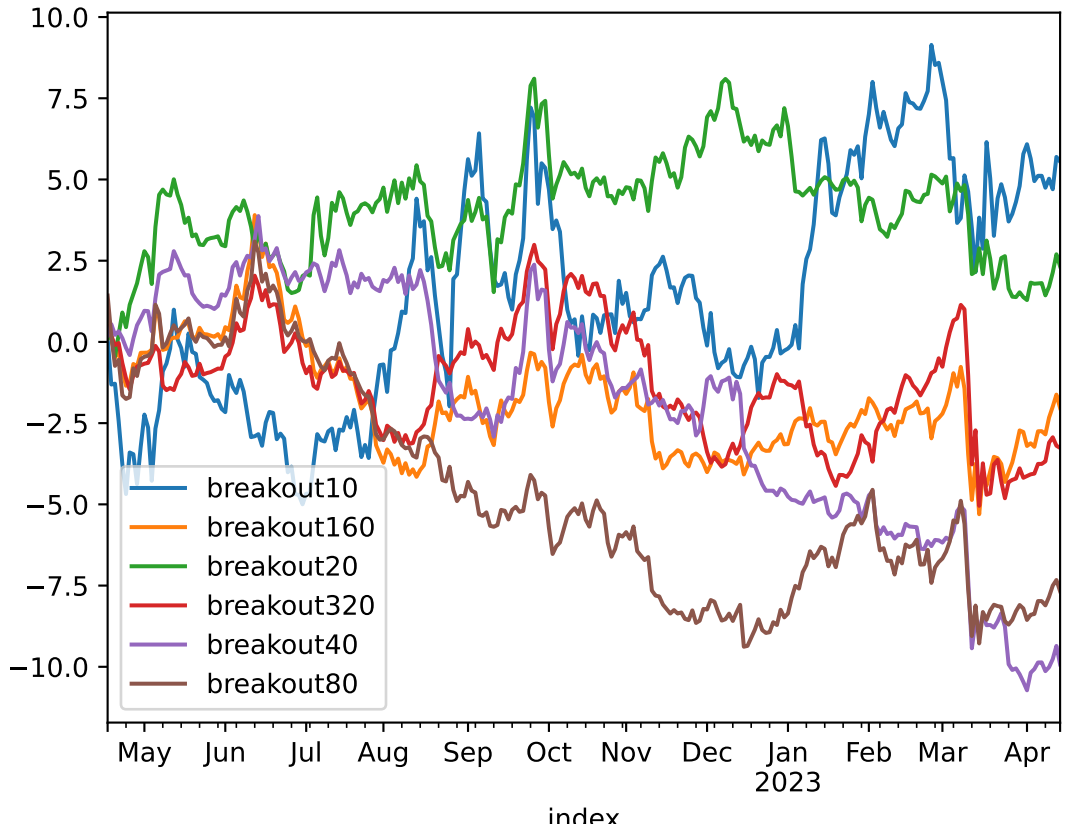


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 5.463, 'breakout160': -2.004, 'breakout20': 2.292, 'breakout320': -3.213, 'breakout40': -9.772, 'breakout80': -7.555}

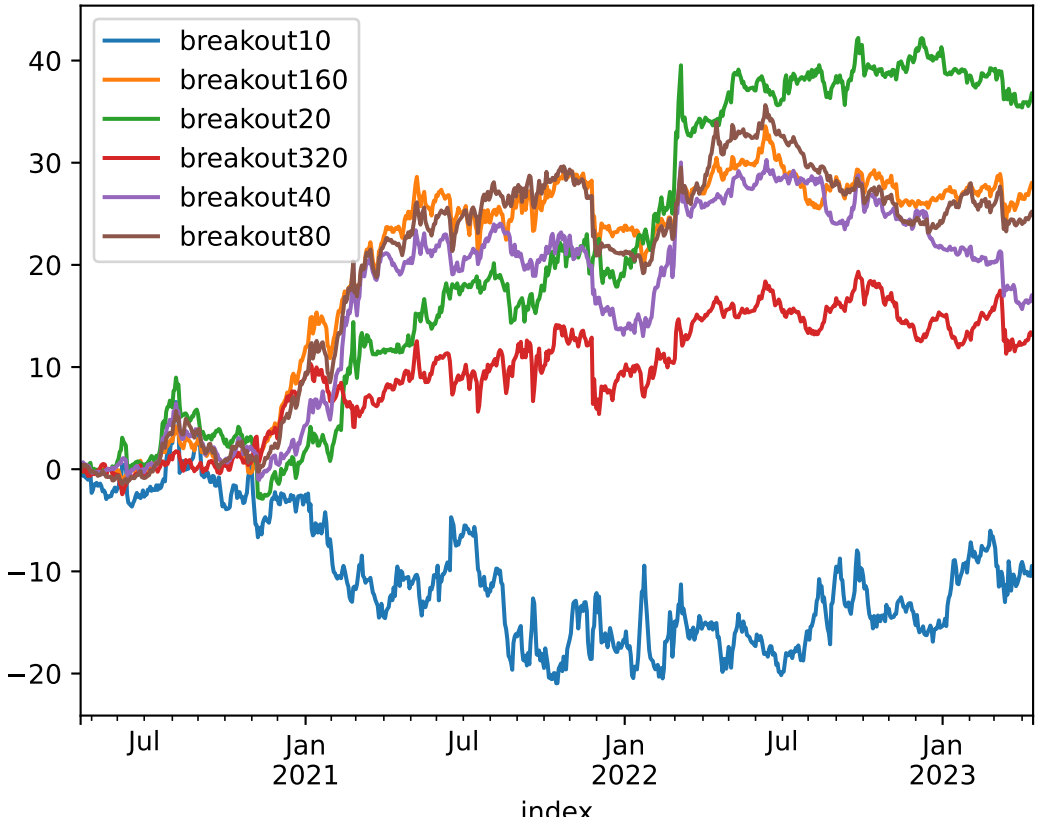
ann. std {'breakout10': 13.611, 'breakout160': 7.159, 'breakout20': 8.616, 'breakout320': 7.574, 'breakout40': 7.217, 'breakout80': 7.157}

ann. SR {'breakout10': 0.4, 'breakout160': -0.28, 'breakout20': 0.27, 'breakout320': -0.42, 'breakout40': -1.35, 'breakout80': -1.06}



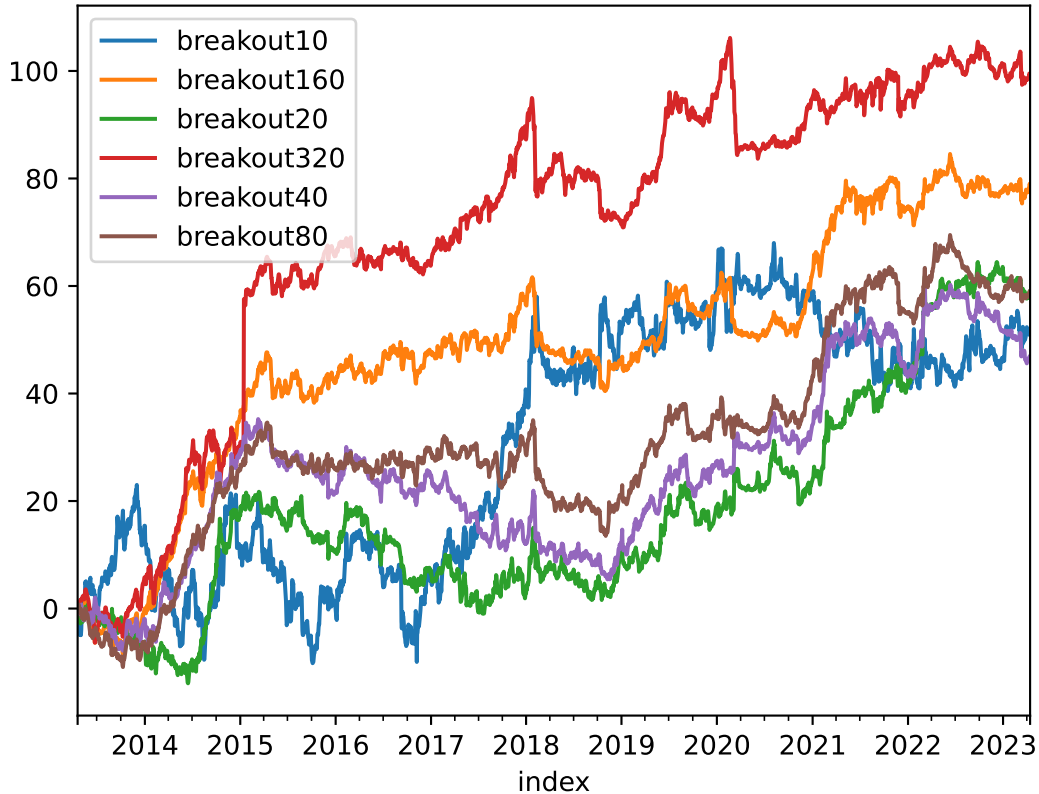
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.154, 'breakout160': 9.07, 'breakout20': 11.961, 'breakout320': 4.294, 'breakout40': 5.406, 'breakout80': 8.166}
 ann. std {'breakout10': 15.069, 'breakout160': 9.181, 'breakout20': 11.029, 'breakout320': 9.903, 'breakout40': 9.471, 'breakout80': 8.911}
 ann. SR {'breakout10': -0.21, 'breakout160': 0.99, 'breakout20': 1.08, 'breakout320': 0.43, 'breakout40': 0.57, 'breakout80': 0.92}



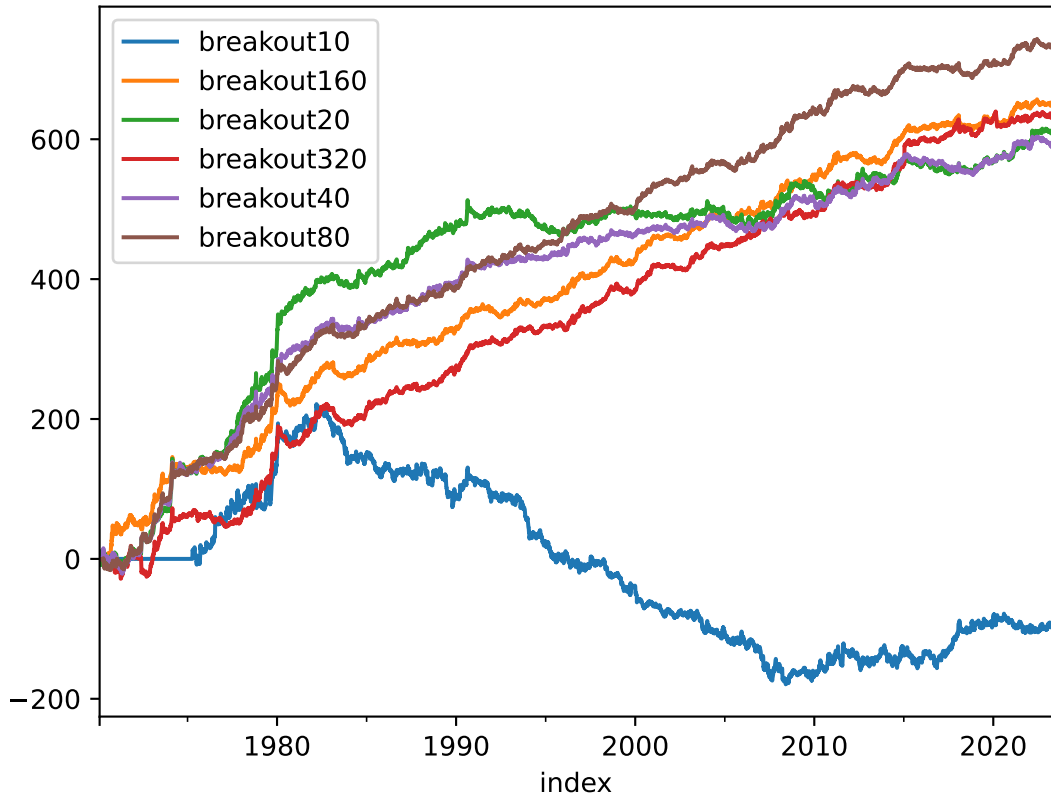
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 5.087, 'breakout160': 7.72, 'breakout20': 5.763, 'breakout320': 9.742, 'breakout40': 4.557, 'breakout80': 5.767}
ann. std {'breakout10': 17.822, 'breakout160': 8.876, 'breakout20': 11.096, 'breakout320': 13.09, 'breakout40': 9.394, 'breakout80': 8.737}
ann. SR {'breakout10': 0.29, 'breakout160': 0.87, 'breakout20': 0.52, 'breakout320': 0.74, 'breakout40': 0.49, 'breakout80': 0.66}



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

ann. mean {'breakout10': -1.743, 'breakout160': 12.01, 'breakout20': 11.241, 'breakout320': 11.671, 'breakout40': 10.883, 'breakout80': 13.514}
 ann. std {'breakout10': 21.324, 'breakout160': 11.531, 'breakout20': 14.893, 'breakout320': 12.117, 'breakout40': 12.114, 'breakout80': 11.72}
 ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

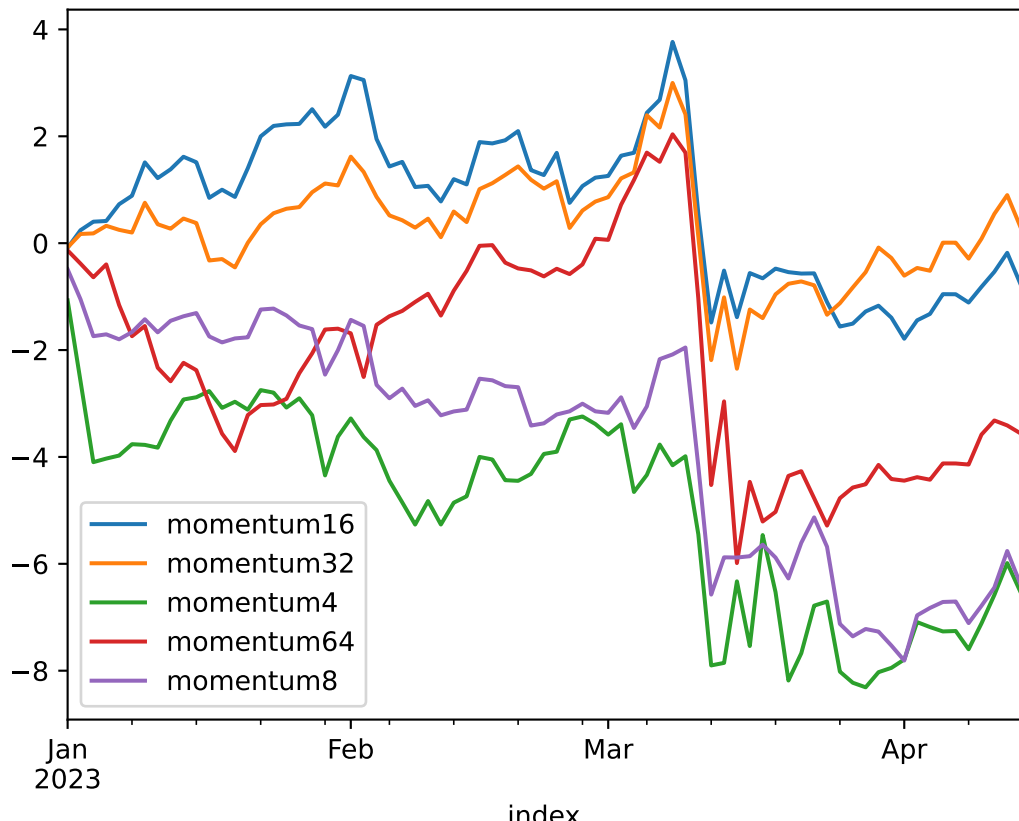


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.553, 'momentum32': 1.089, 'momentum4': -22.225, 'momentum64': -12.132, 'momentum8': -21.717}

ann. std {'momentum16': 9.123, 'momentum32': 9.099, 'momentum4': 11.439, 'momentum64': 12.341, 'momentum8': 8.926}

ann. SR {'momentum16': -0.28, 'momentum32': 0.12, 'momentum4': -1.94, 'momentum64': -0.98, 'momentum8': -2.43}

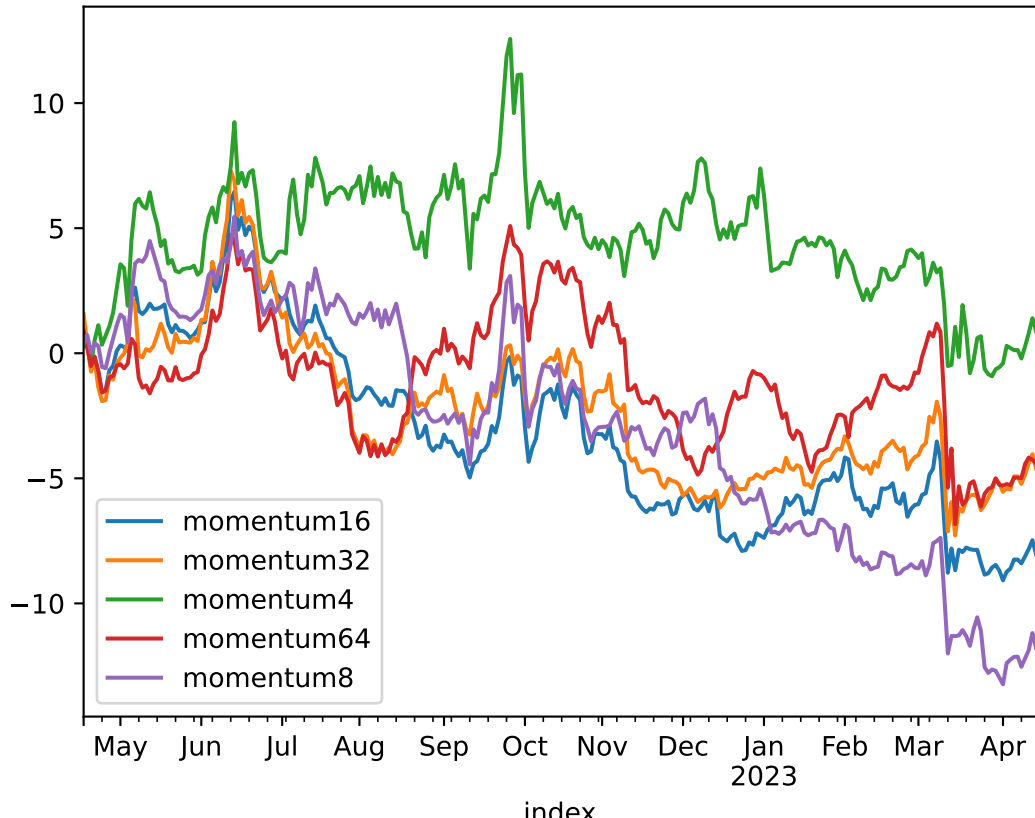


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -7.916, 'momentum32': -4.543, 'momentum4': 0.863, 'momentum64': -4.337, 'momentum8': -11.606}

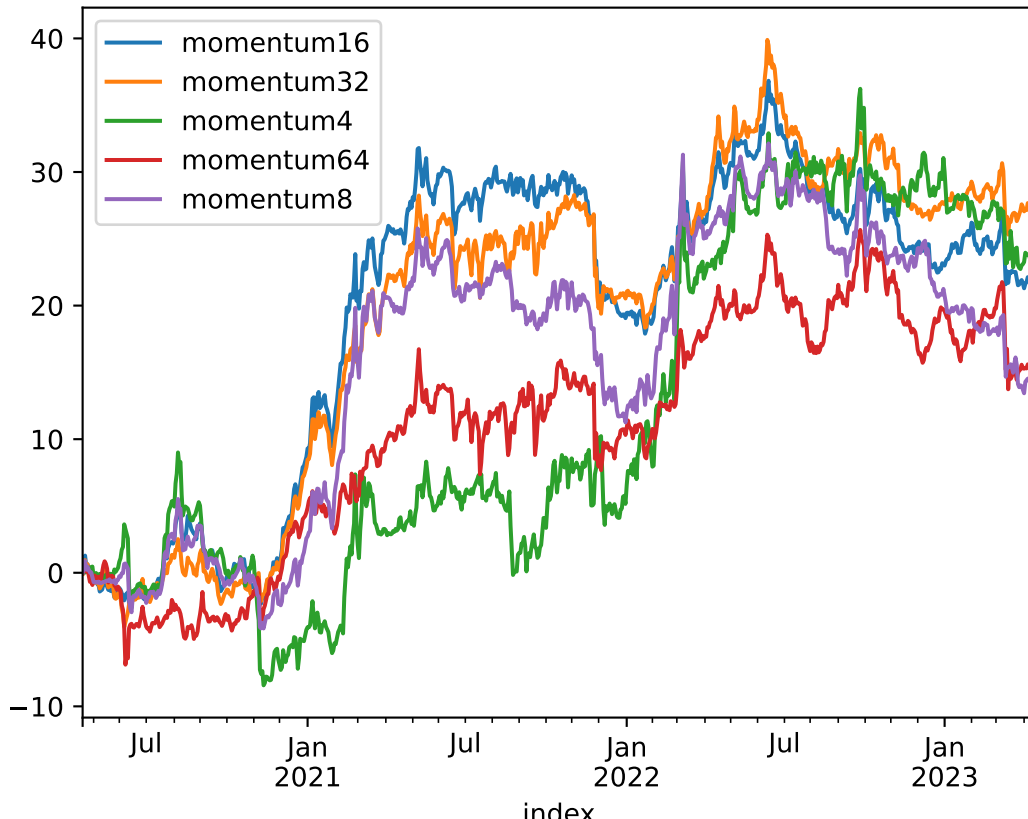
ann. std {'momentum16': 8.989, 'momentum32': 9.593, 'momentum4': 13.583, 'momentum64': 10.372, 'momentum8': 10.055}

ann. SR {'momentum16': -0.88, 'momentum32': -0.47, 'momentum4': 0.06, 'momentum64': -0.42, 'momentum8': -1.15}



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

ann. mean {'momentum16': 7.33, 'momentum32': 9.184, 'momentum4': 8.053, 'momentum64': 5.306, 'momentum8': 4.886}
ann. std {'momentum16': 10.154, 'momentum32': 10.406, 'momentum4': 14.624, 'momentum64': 10.835, 'momentum8': 11.415}
ann. SR {'momentum16': 0.72, 'momentum32': 0.88, 'momentum4': 0.55, 'momentum64': 0.49, 'momentum8': 0.43}

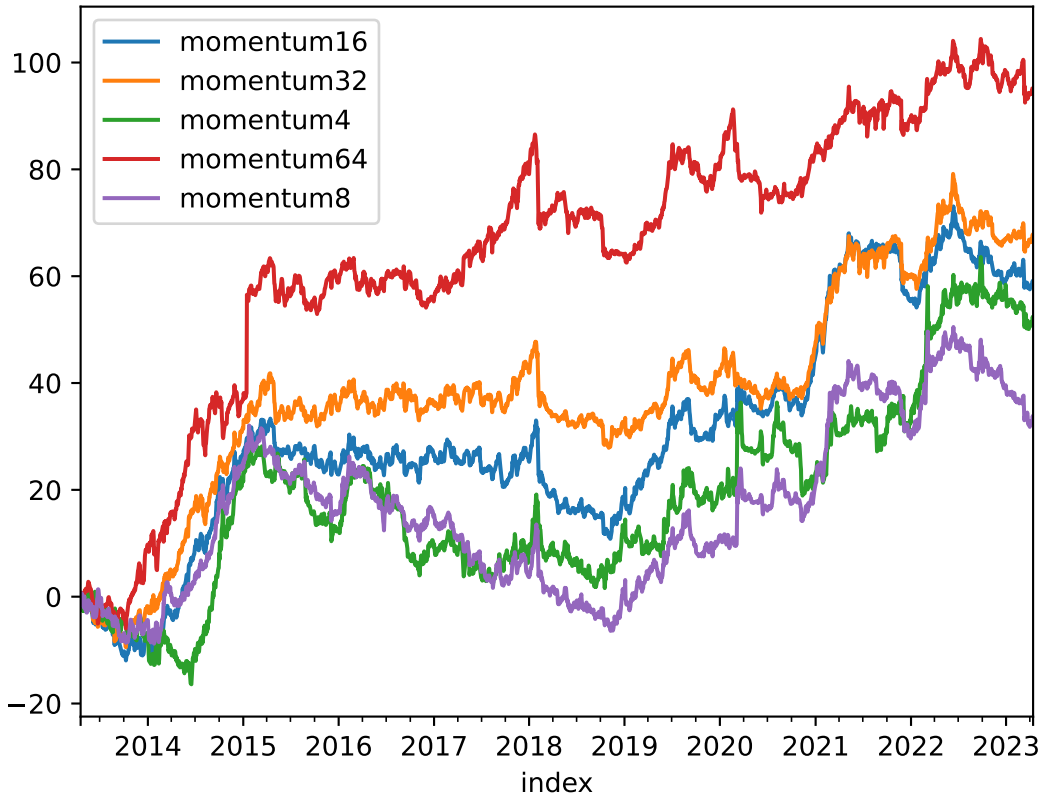


Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 5.751, 'momentum32': 6.604, 'momentum4': 5.095, 'momentum64': 9.322, 'momentum8': 3.264}

ann. std {'momentum16': 9.67, 'momentum32': 9.278, 'momentum4': 13.69, 'momentum64': 11.875, 'momentum8': 10.873}

ann. SR {'momentum16': 0.59, 'momentum32': 0.71, 'momentum4': 0.37, 'momentum64': 0.78, 'momentum8': 0.3}

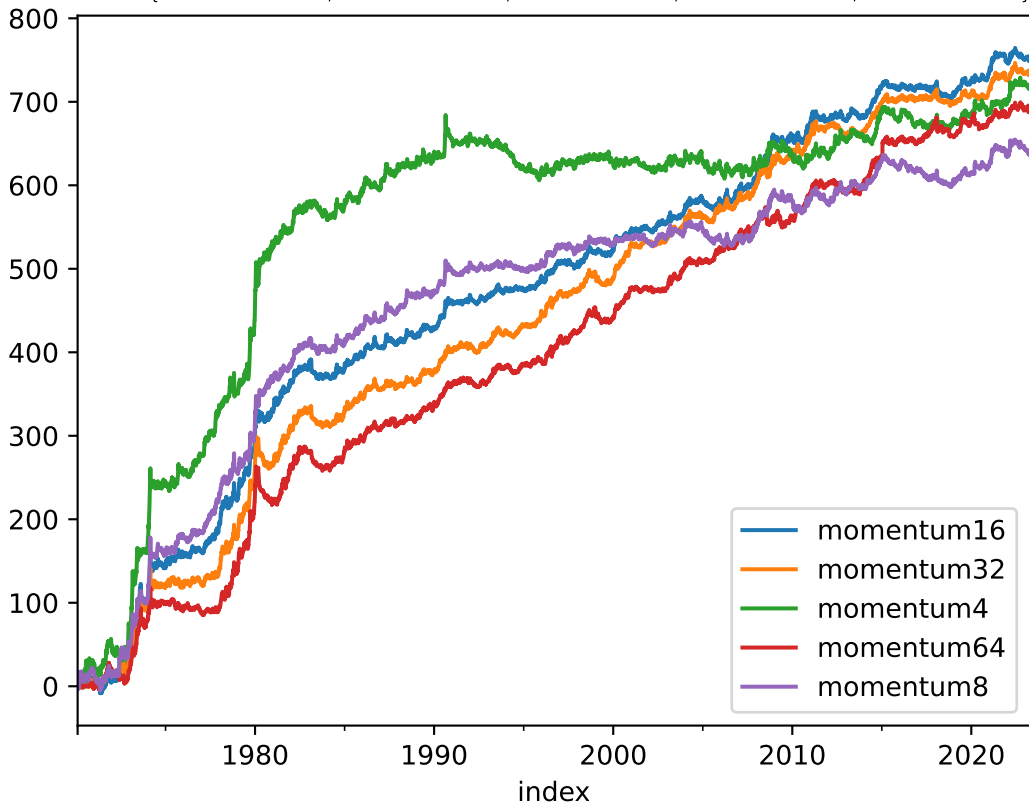


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.835, 'momentum32': 13.551, 'momentum4': 13.232, 'momentum64': 12.725, 'momentum8': 11.759}

ann. std {'momentum16': 13.049, 'momentum32': 12.612, 'momentum4': 17.896, 'momentum64': 12.333, 'momentum8': 14.333}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}

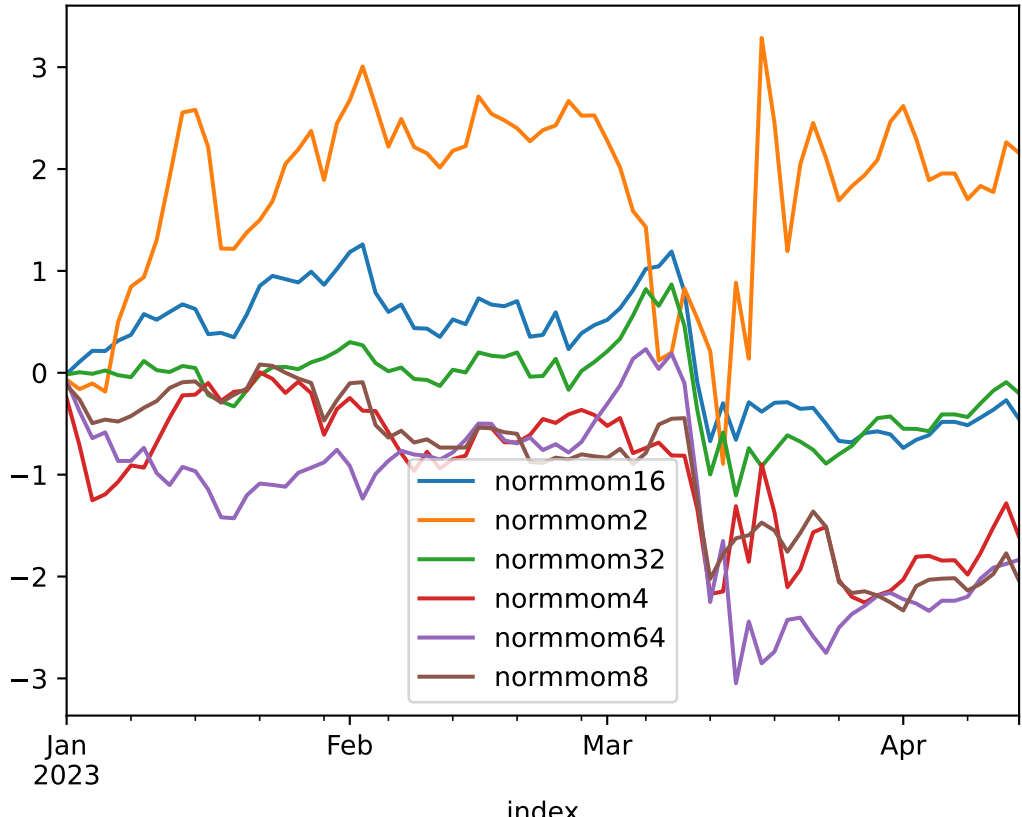


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.551, 'normmom2': 7.365, 'normmom32': -0.686, 'normmom64': -5.498, 'normmom8': -6.967}

ann. std {'normmom16': 3.286, 'normmom2': 9.527, 'normmom32': 3.232, 'normmom4': 4.594, 'normmom64': 4.812, 'normmom8': 3.141}

ann. SR {'normmom16': -0.47, 'normmom2': 0.77, 'normmom32': -0.21, 'normmom4': -1.2, 'normmom64': -1.3, 'normmom8': -2.22}

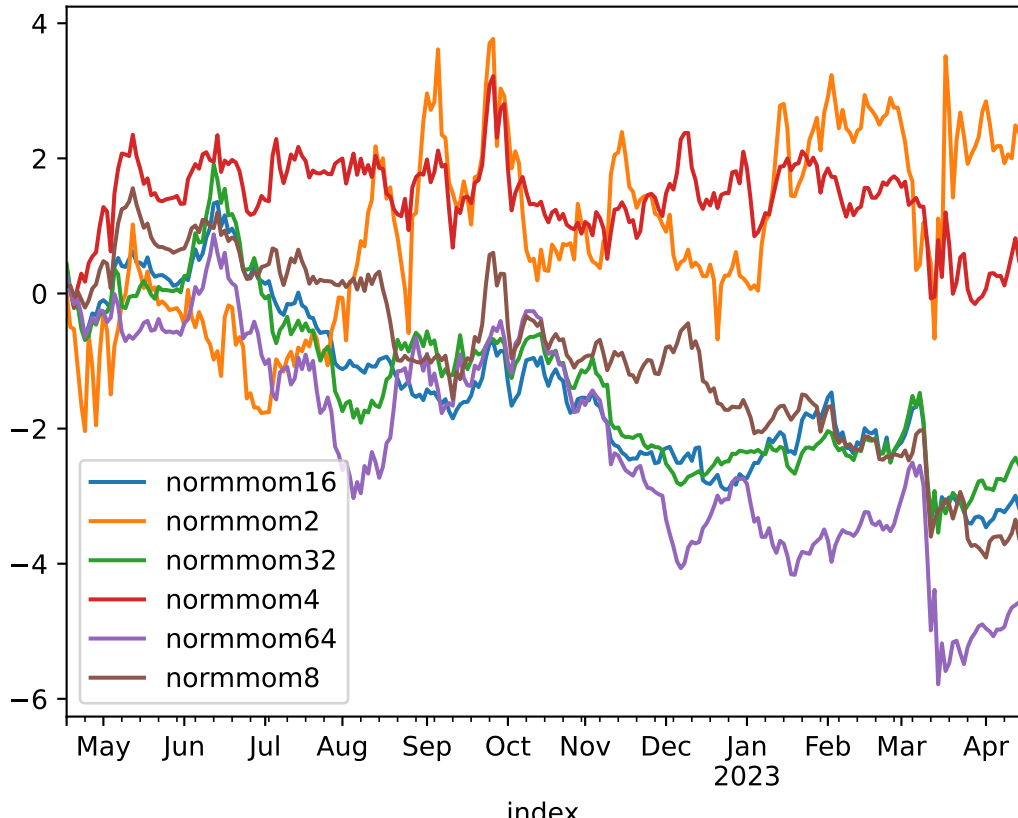


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.129, 'normmom2': 2.347, 'normmom32': -2.499, 'normmom4': 0.481, 'normmom64': -4.502, 'normmom8': -3.562}

ann. std {'normmom16': 2.689, 'normmom2': 7.846, 'normmom32': 3.002, 'normmom4': 4.365, 'normmom64': 3.857, 'normmom8': 2.97}

ann. SR {'normmom16': -1.16, 'normmom2': 0.3, 'normmom32': -0.83, 'normmom4': 0.11, 'normmom64': -1.17, 'normmom8': -1.2}

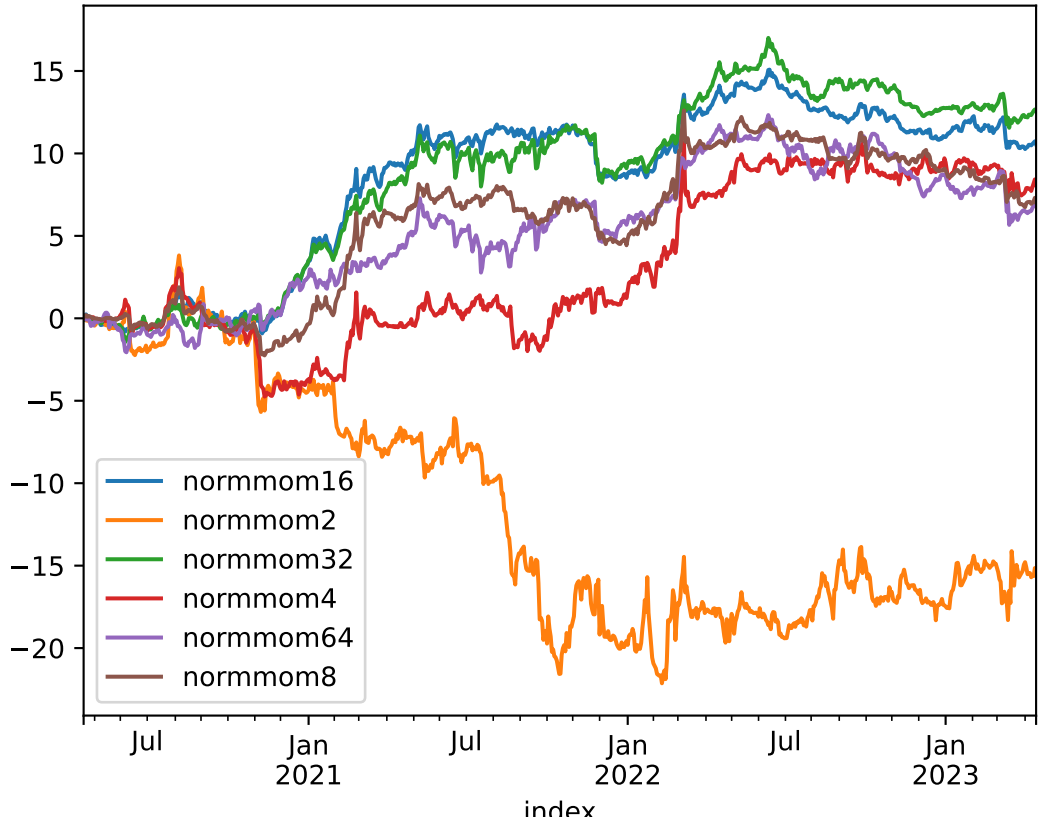


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.462, 'normmom2': -5.005, 'normmom32': 4.121, 'normmom4': 2.657, 'normmom64': 2.257, 'normmom8': 2.31}

ann. std {'normmom16': 3.512, 'normmom2': 8.625, 'normmom32': 3.883, 'normmom4': 5.362, 'normmom64': 4.28, 'normmom8': 3.923}

ann. SR {'normmom16': 0.99, 'normmom2': -0.58, 'normmom32': 1.06, 'normmom4': 0.5, 'normmom64': 0.53, 'normmom8': 0.59}

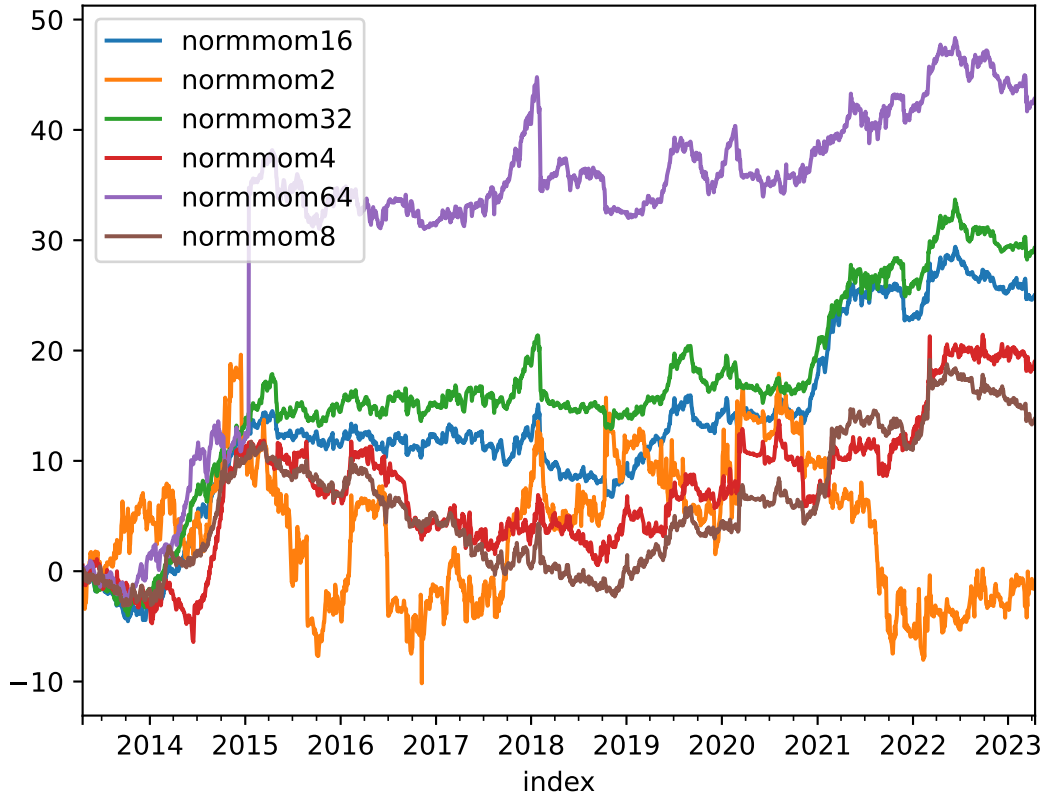


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.443, 'normmom2': -0.113, 'normmom32': 2.872, 'normmom4': 1.837, 'normmom64': 4.212, 'normmom8': 1.334}

ann. std {'normmom16': 3.468, 'normmom2': 10.33, 'normmom32': 3.625, 'normmom4': 5.45, 'normmom64': 8.273, 'normmom8': 3.885}

ann. SR {'normmom16': 0.7, 'normmom2': -0.01, 'normmom32': 0.79, 'normmom4': 0.34, 'normmom64': 0.51, 'normmom8': 0.34}

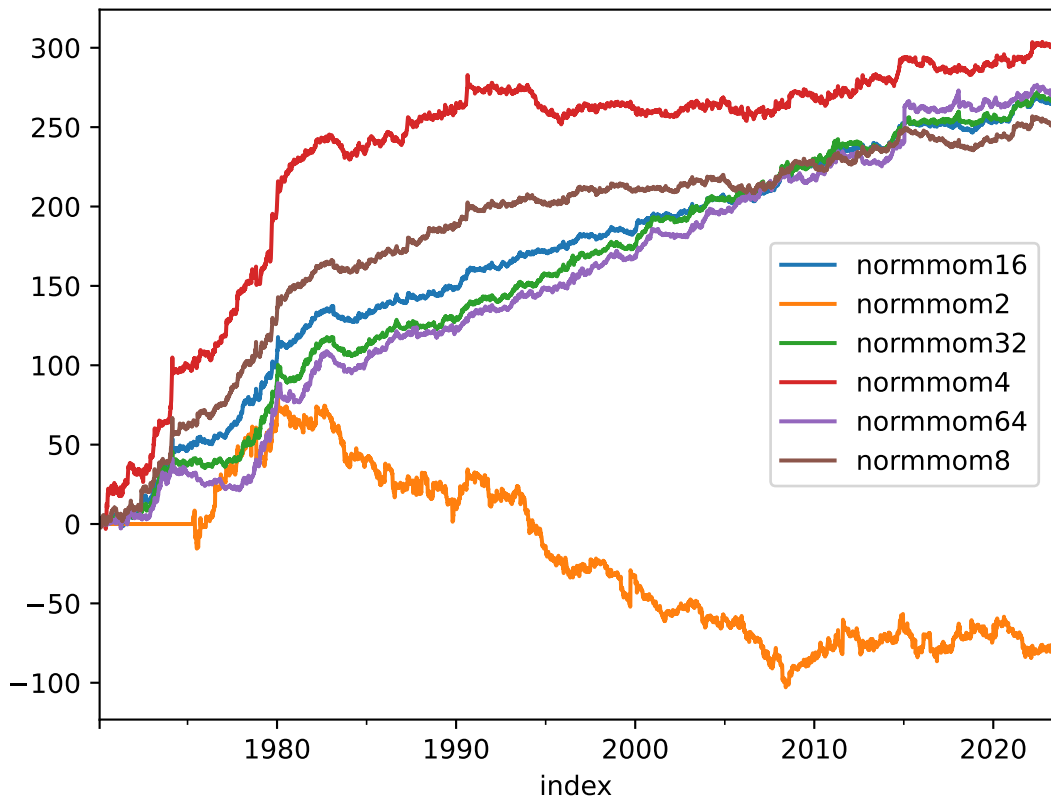


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.884, 'normmom2': -1.429, 'normmom32': 4.937, 'normmom4': 5.551, 'normmom64': 5.003, 'normmom8': 4.635}

ann. std {'normmom16': 4.533, 'normmom2': 11.613, 'normmom32': 4.61, 'normmom4': 7.385, 'normmom64': 5.871, 'normmom8': 5.366}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}



Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -0.546, 'relmomentum20': -11.912, 'relmomentum40': 12.713, 'relmomentum80': 14.202}

ann. std {'relmomentum10': 8.461, 'relmomentum20': 6.748, 'relmomentum40': 5.2, 'relmomentum80': 4.099}

ann. SR {'relmomentum10': -0.06, 'relmomentum20': -1.77, 'relmomentum40': 2.44, 'relmomentum80': 3.46}

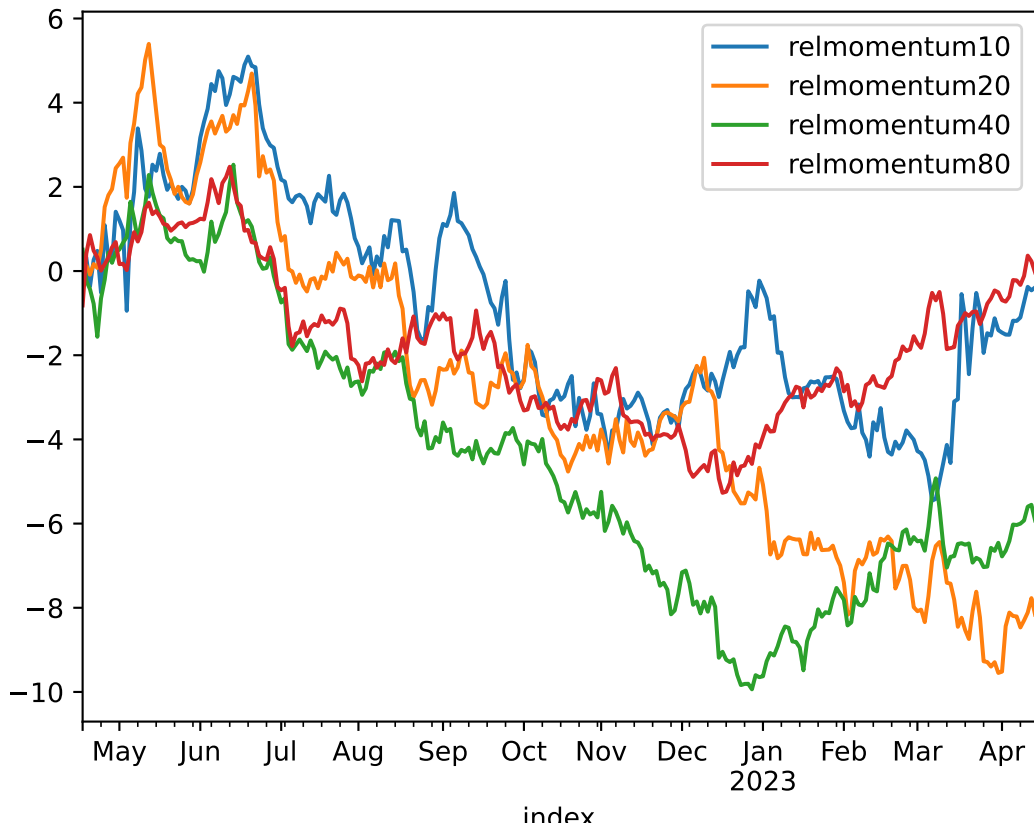


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -0.382, 'relmomentum20': -8.038, 'relmomentum40': -5.834, 'relmomentum80': -0.032}

ann. std {'relmomentum10': 8.318, 'relmomentum20': 6.696, 'relmomentum40': 5.474, 'relmomentum80': 4.713}

ann. SR {'relmomentum10': -0.05, 'relmomentum20': -1.2, 'relmomentum40': -1.07, 'relmomentum80': -0.01}

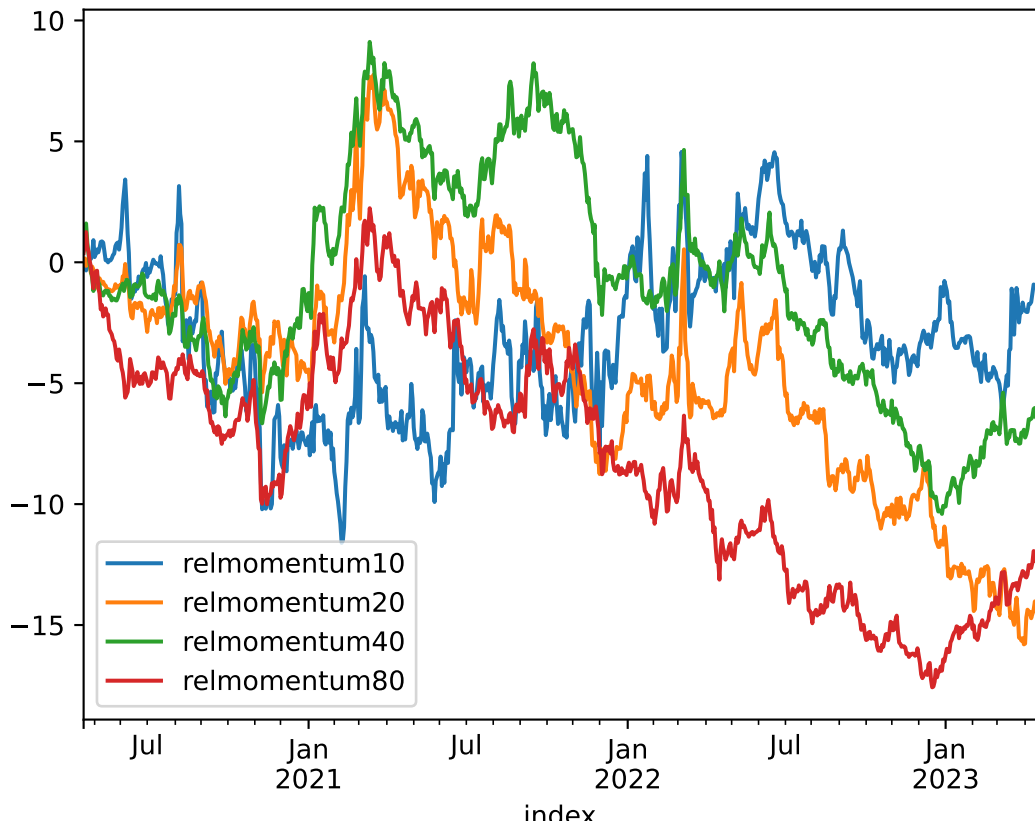


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.306, 'relmomentum20': -4.731, 'relmomentum40': -2.098, 'relmomentum80': -4.05}

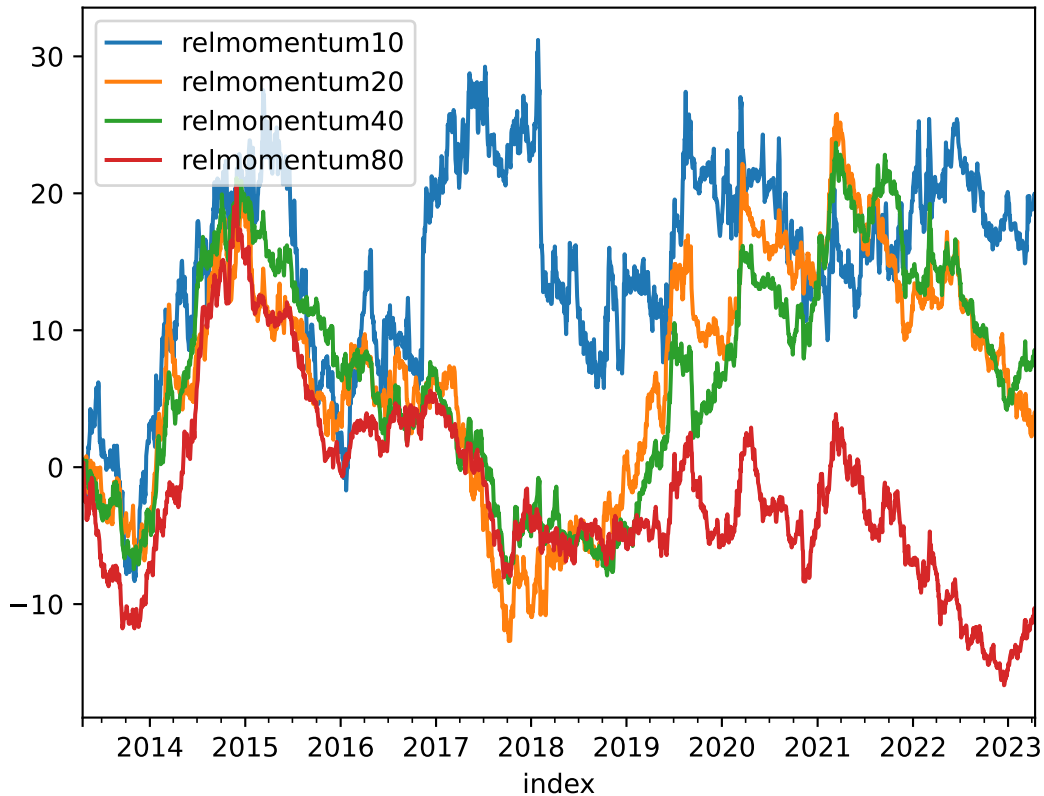
ann. std {'relmomentum10': 11.927, 'relmomentum20': 8.341, 'relmomentum40': 6.972, 'relmomentum80': 6.351}

ann. SR {'relmomentum10': -0.03, 'relmomentum20': -0.57, 'relmomentum40': -0.3, 'relmomentum80': -0.64}

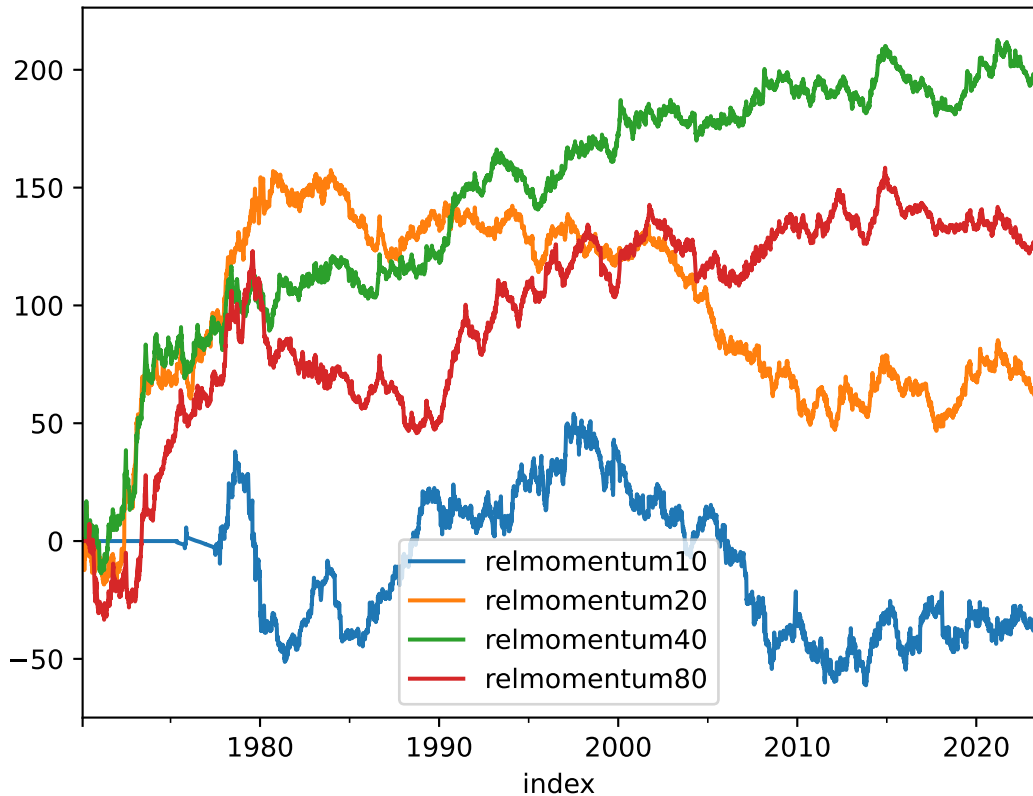


Total Trading Rule P&L for period '10Y'

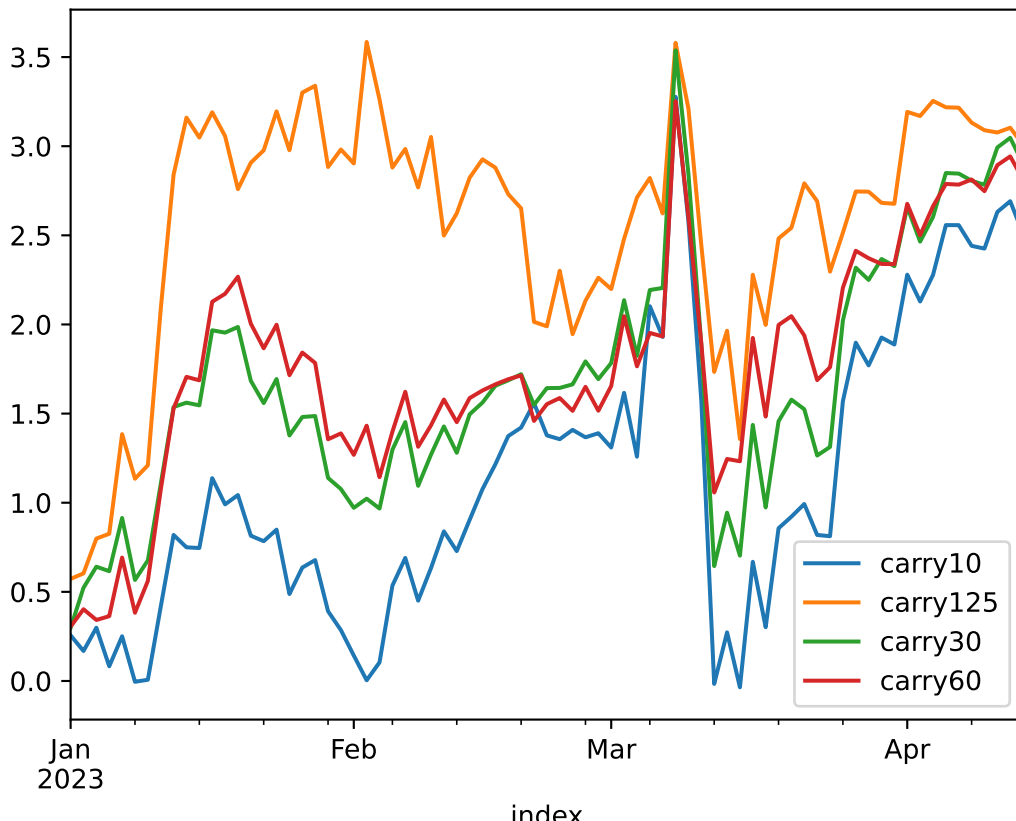
ann. mean {'relmomentum10': 1.958, 'relmomentum20': 0.356, 'relmomentum40': 0.805, 'relmomentum80': -1.05}
ann. std {'relmomentum10': 13.423, 'relmomentum20': 8.578, 'relmomentum40': 7.004, 'relmomentum80': 6.396}
ann. SR {'relmomentum10': 0.15, 'relmomentum20': 0.04, 'relmomentum40': 0.11, 'relmomentum80': -0.16}



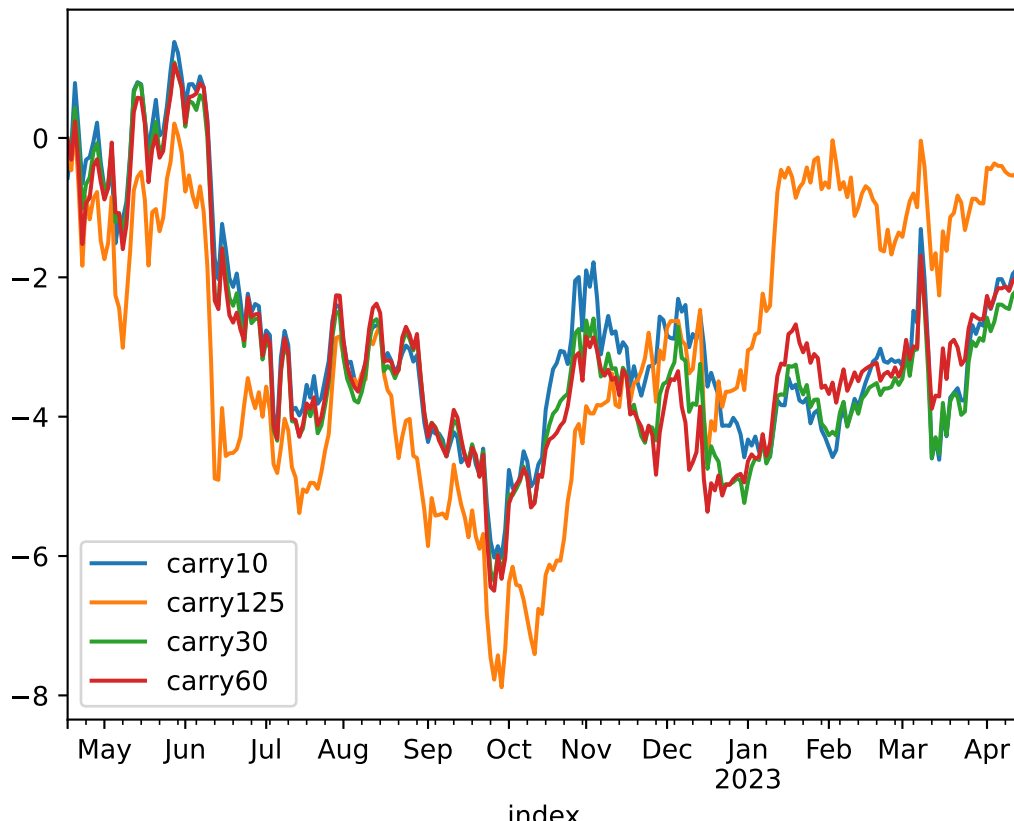
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.608, 'relmomentum20': 1.164, 'relmomentum40': 3.637, 'relmomentum80': 2.347}
ann. std {'relmomentum10': 13.393, 'relmomentum20': 10.47, 'relmomentum40': 9.64, 'relmomentum80': 9.785}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



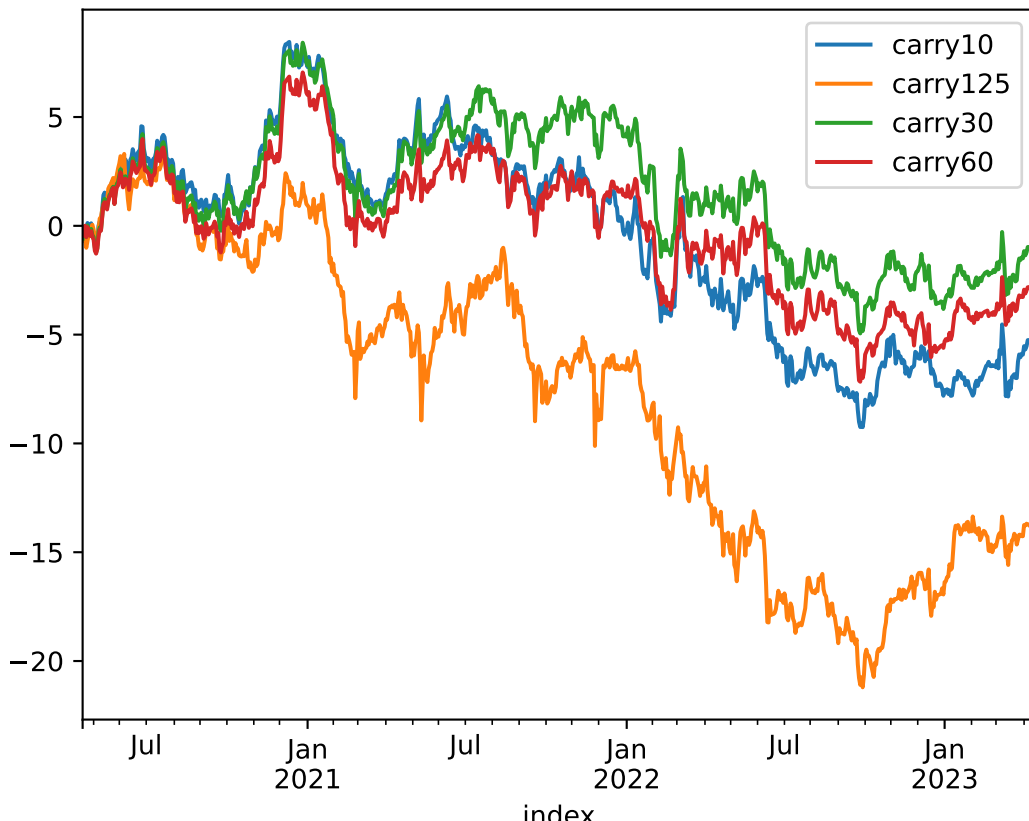
Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 8.558, 'carry125': 10.264, 'carry30': 9.898, 'carry60': 9.597}
ann. std {'carry10': 6.054, 'carry125': 5.625, 'carry30': 5.541, 'carry60': 4.939}
ann. SR {'carry10': 1.41, 'carry125': 1.82, 'carry30': 1.79, 'carry60': 1.94}



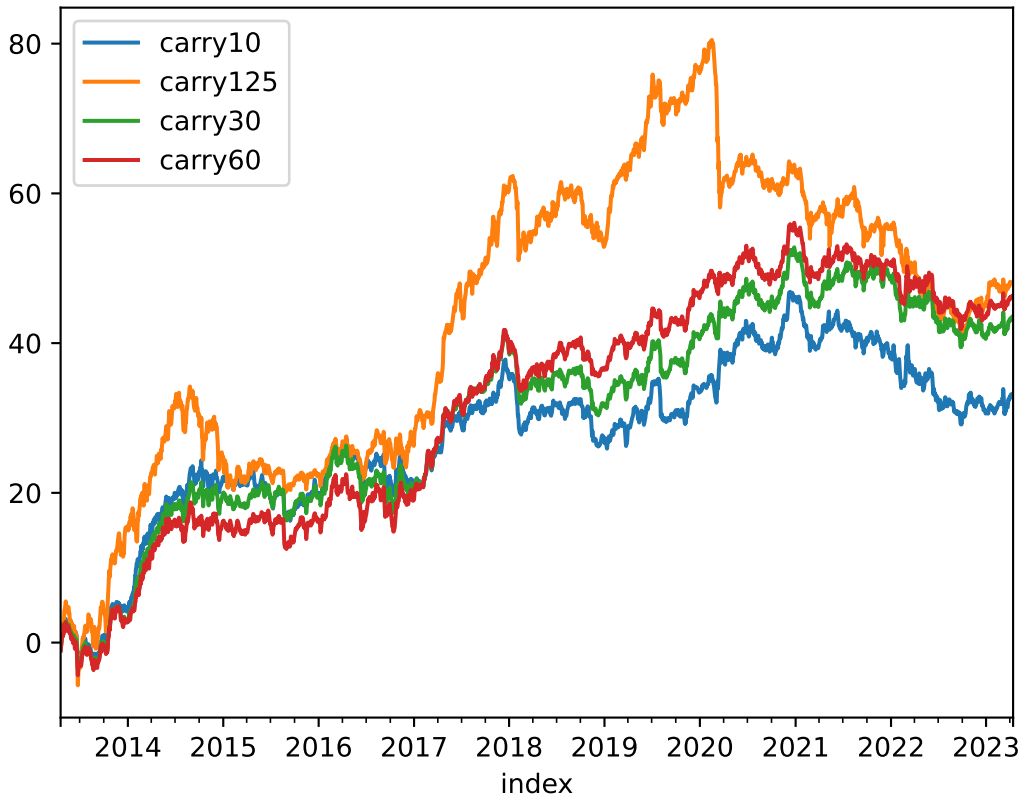
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.044, 'carry125': -0.602, 'carry30': -2.303, 'carry60': -2.099}
ann. std {'carry10': 6.244, 'carry125': 6.942, 'carry30': 6.158, 'carry60': 6.171}
ann. SR {'carry10': -0.33, 'carry125': -0.09, 'carry30': -0.37, 'carry60': -0.34}



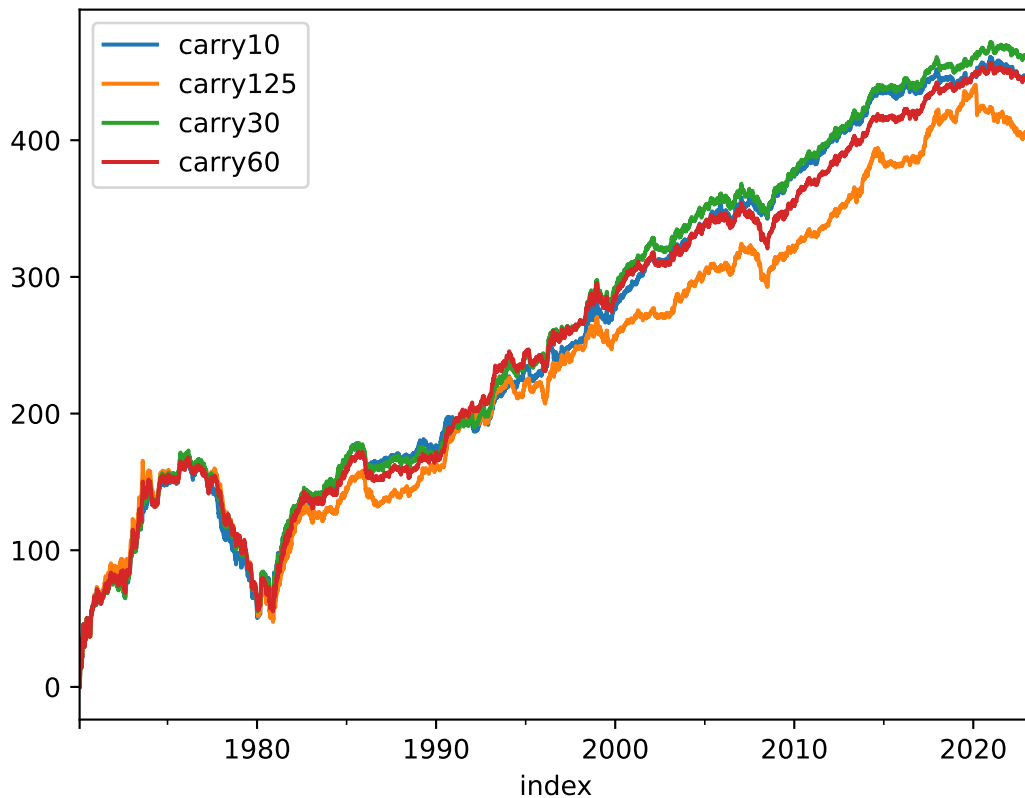
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': -1.74, 'carry125': -4.574, 'carry30': -0.303, 'carry60': -0.918}
ann. std {'carry10': 6.575, 'carry125': 8.003, 'carry30': 6.502, 'carry60': 6.482}
ann. SR {'carry10': -0.26, 'carry125': -0.57, 'carry30': -0.05, 'carry60': -0.14}



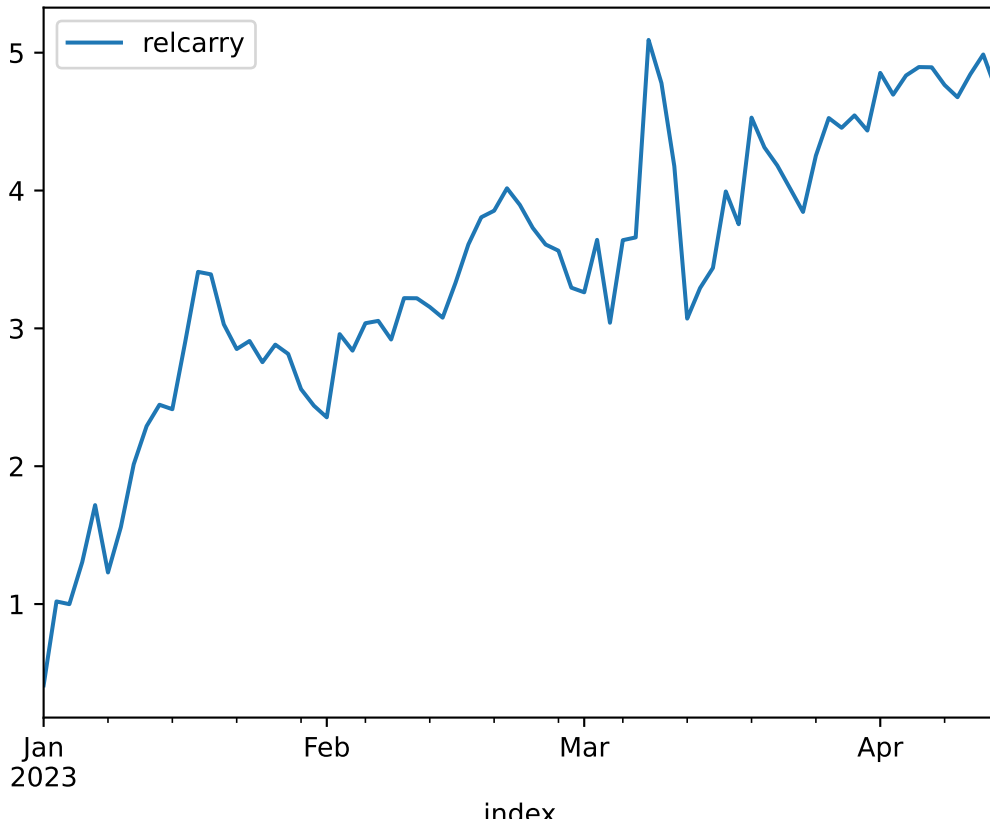
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.25, 'carry125': 4.707, 'carry30': 4.268, 'carry60': 4.54}
ann. std {'carry10': 6.38, 'carry125': 8.979, 'carry30': 6.469, 'carry60': 6.423}
ann. SR {'carry10': 0.51, 'carry125': 0.52, 'carry30': 0.66, 'carry60': 0.71}



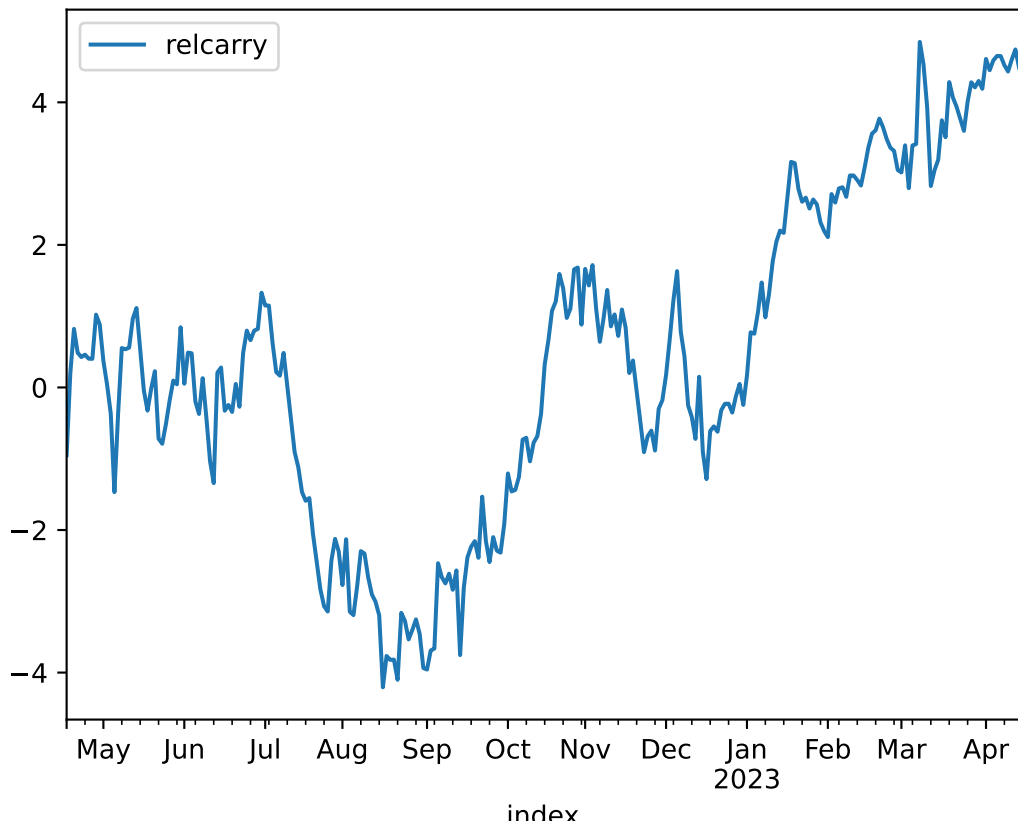
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.247, 'carry125': 7.527, 'carry30': 8.533, 'carry60': 8.241}
ann. std {'carry10': 11.203, 'carry125': 11.561, 'carry30': 11.26, 'carry60': 11.264}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



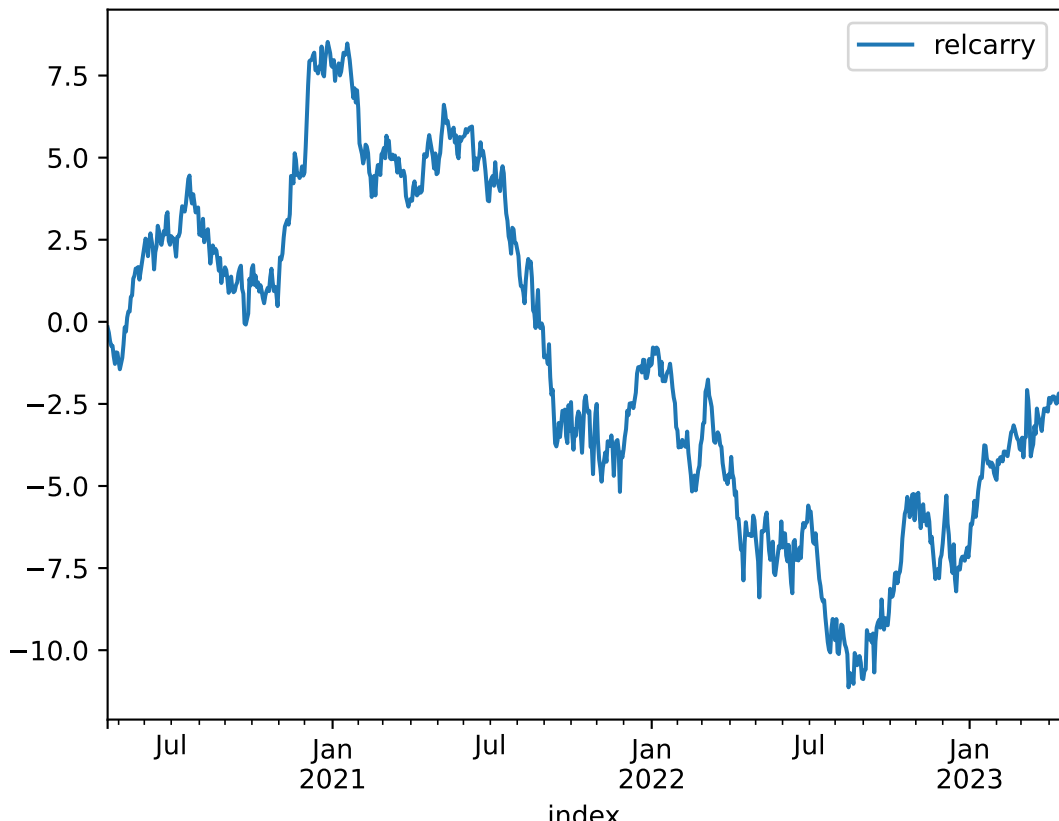
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 16.151}
ann. std {'relcarry': 5.648}
ann. SR {'relcarry': 2.86}



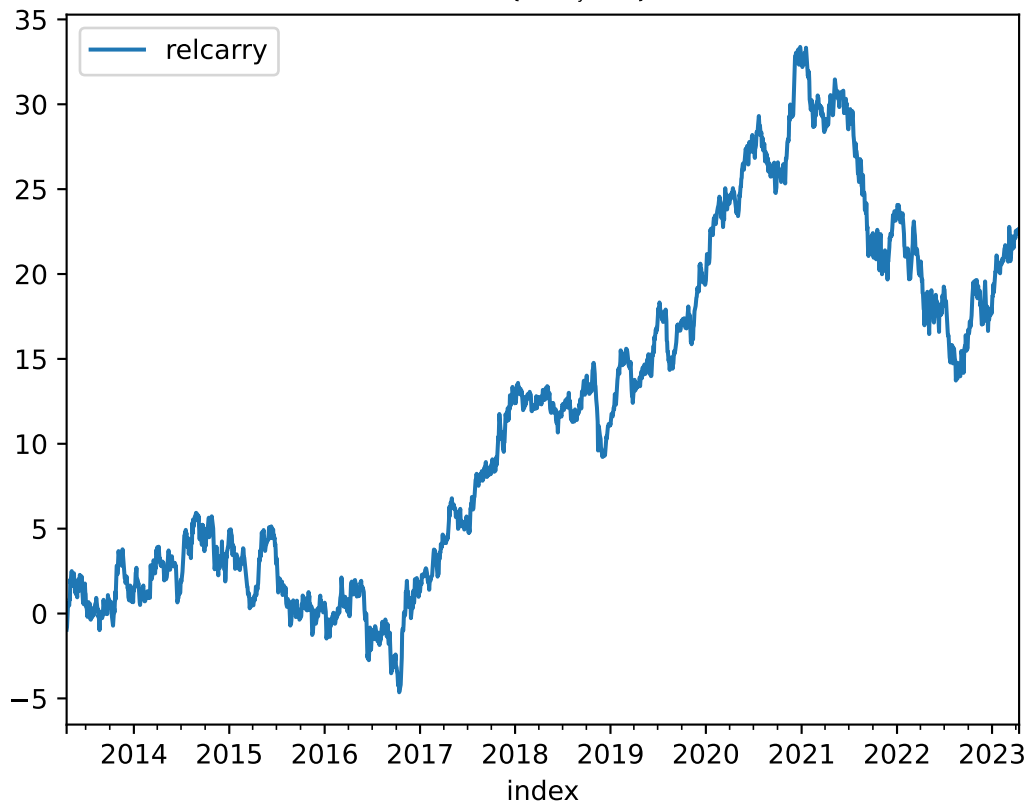
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 4.418}
ann. std {'relcarry': 7.096}
ann. SR {'relcarry': 0.62}



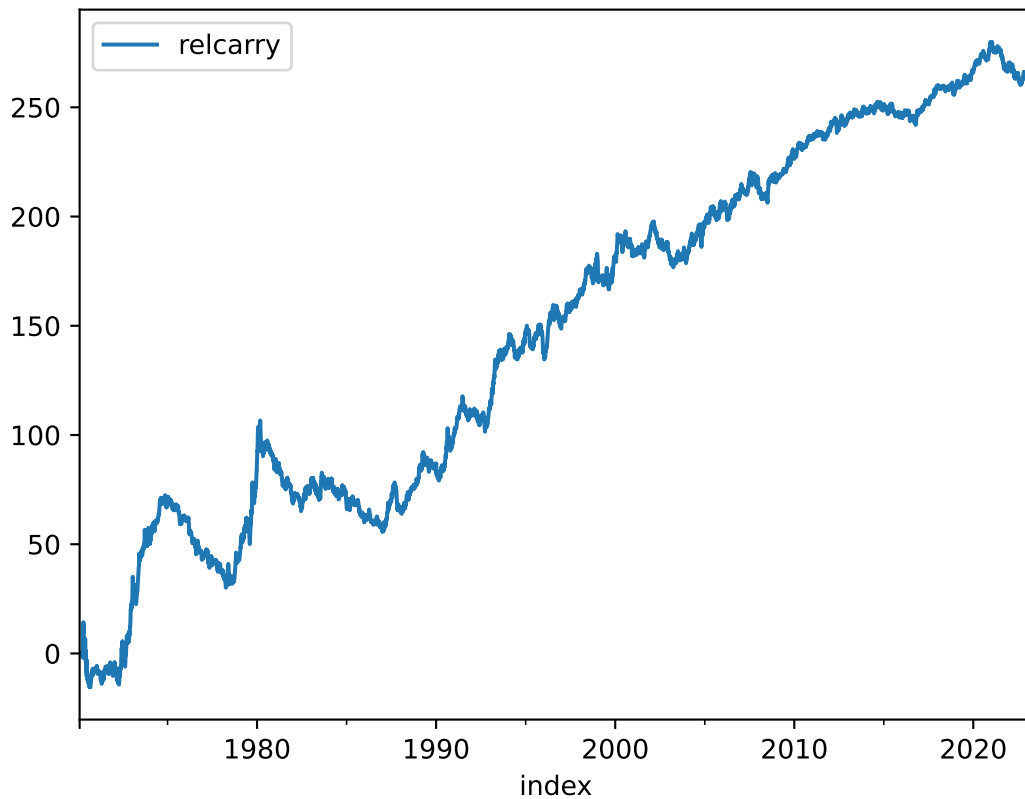
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.8}
ann. std {'relcarry': 6.65}
ann. SR {'relcarry': -0.12}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.201}
ann. std {'relcarry': 5.832}
ann. SR {'relcarry': 0.38}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.961}
ann. std {'relcarry': 8.962}
ann. SR {'relcarry': 0.55}

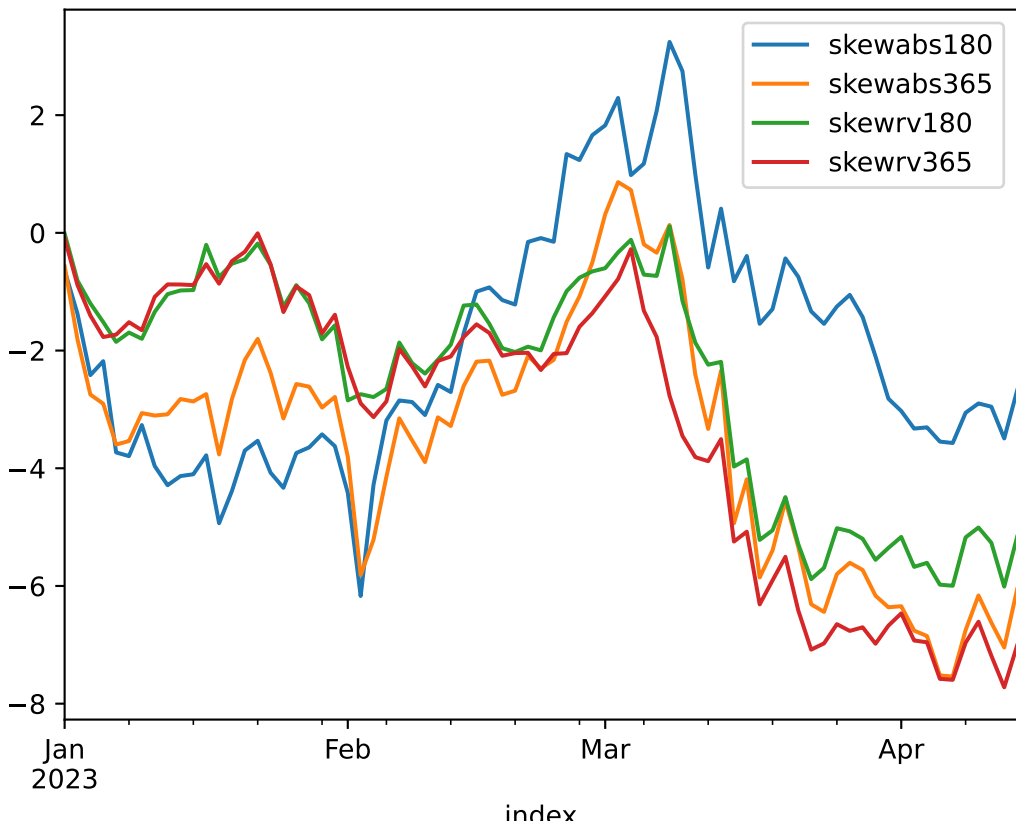


Total Trading Rule P&L for period 'YTD'

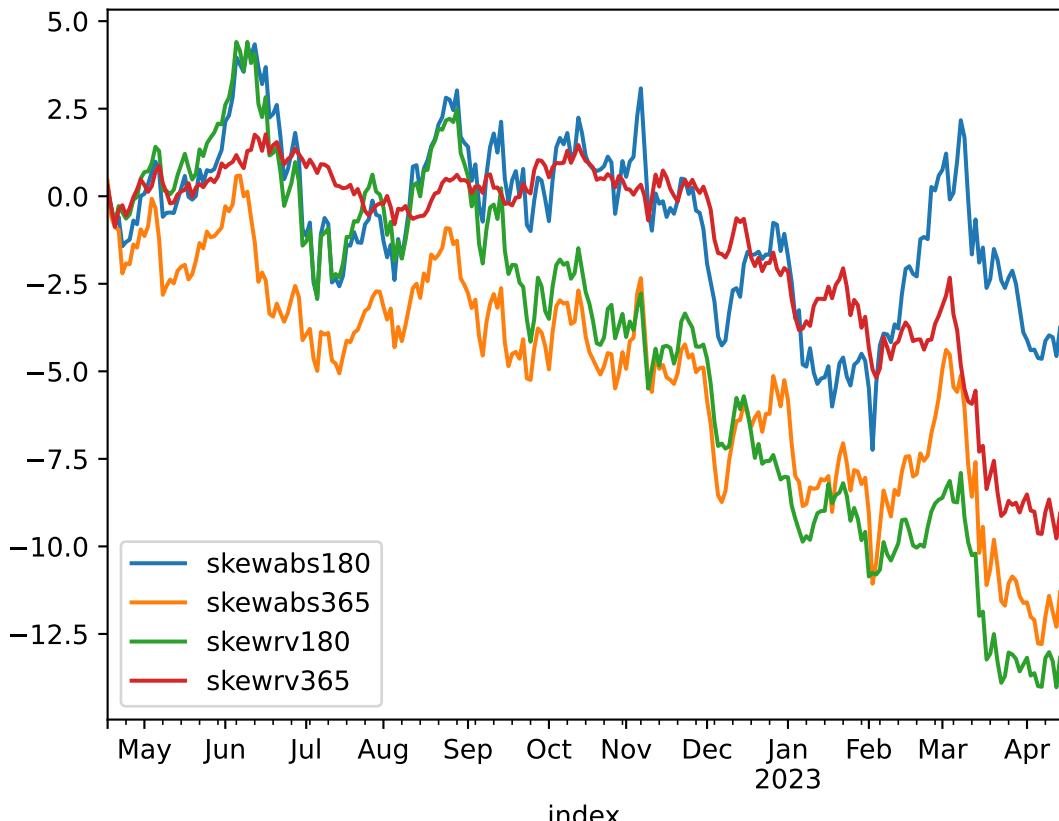
ann. mean {'skewabs180': -9.151, 'skewabs365': -20.676, 'skewrv180': -17.637, 'skewrv365': -23.937}

ann. std {'skewabs180': 11.817, 'skewabs365': 11.967, 'skewrv180': 8.352, 'skewrv365': 7.993}

ann. SR {'skewabs180': -0.77, 'skewabs365': -1.73, 'skewrv180': -2.11, 'skewrv365': -2.99}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -3.696, 'skewabs365': -11.135, 'skewrv180': -12.977, 'skewrv365': -8.924}
ann. std {'skewabs180': 11.056, 'skewabs365': 9.96, 'skewrv180': 9.268, 'skewrv365': 5.68}
ann. SR {'skewabs180': -0.33, 'skewabs365': -1.12, 'skewrv180': -1.4, 'skewrv365': -1.57}

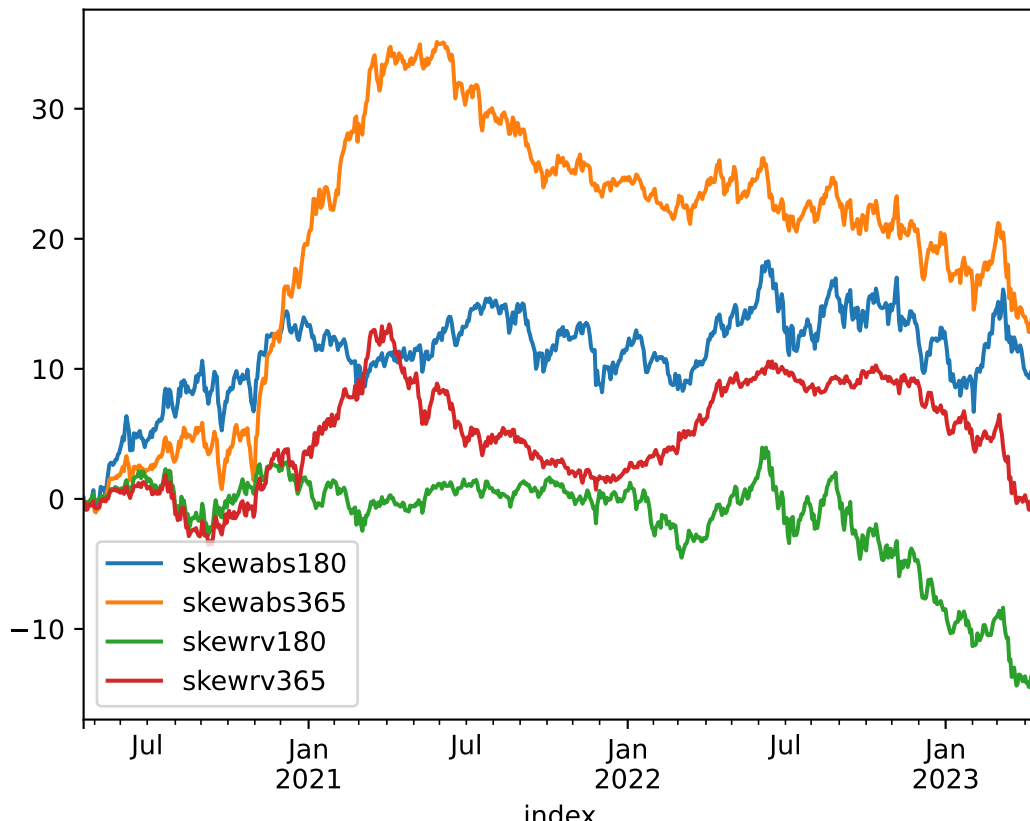


Total Trading Rule P&L for period '3Y'

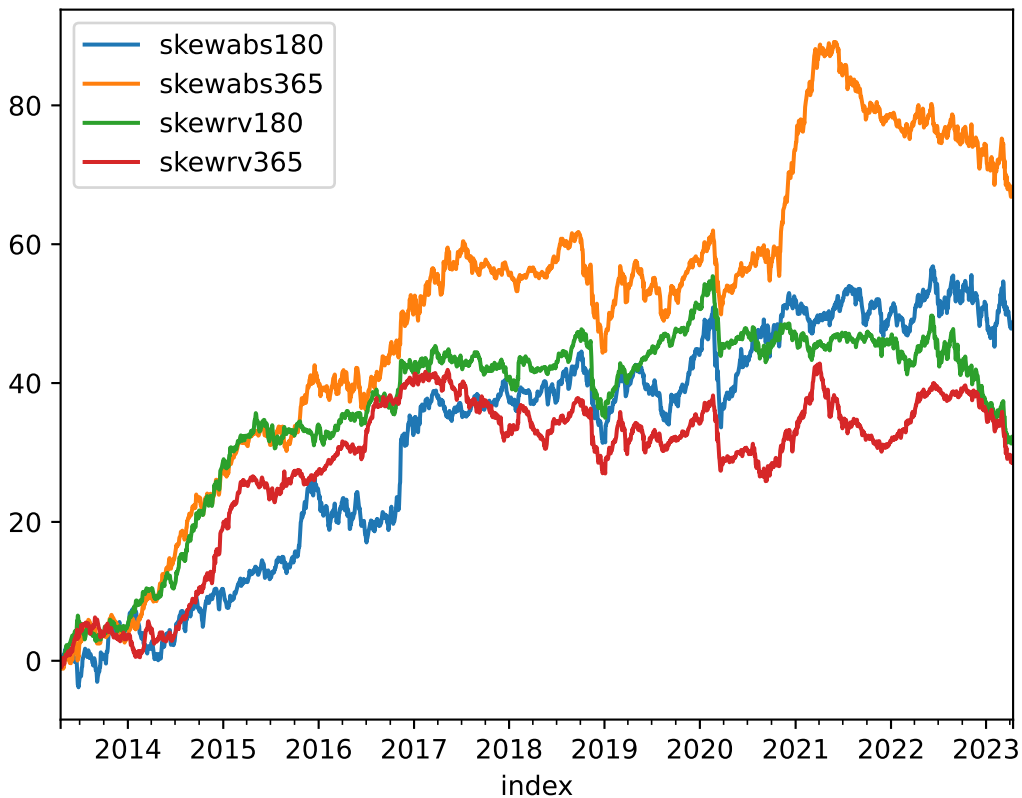
ann. mean {'skewabs180': 3.341, 'skewabs365': 4.693, 'skewrv180': -4.477, 'skewrv365': -0.085}

ann. std {'skewabs180': 9.133, 'skewabs365': 8.886, 'skewrv180': 7.23, 'skewrv365': 6.306}

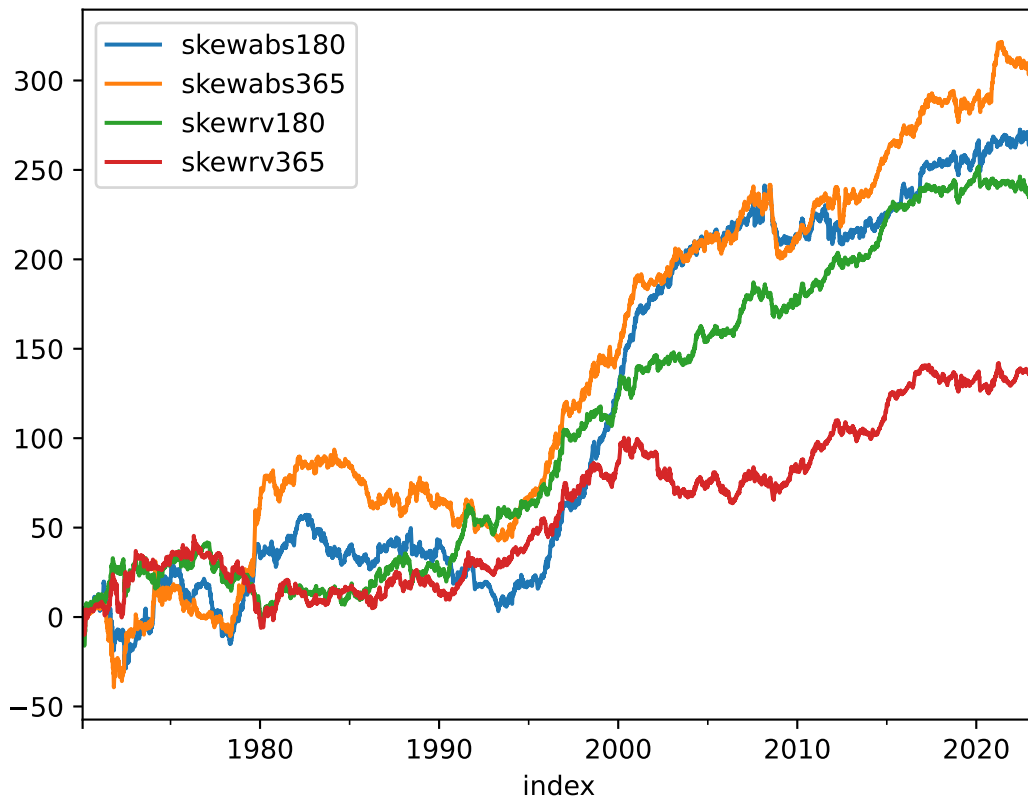
ann. SR {'skewabs180': 0.37, 'skewabs365': 0.53, 'skewrv180': -0.62, 'skewrv365': -0.01}



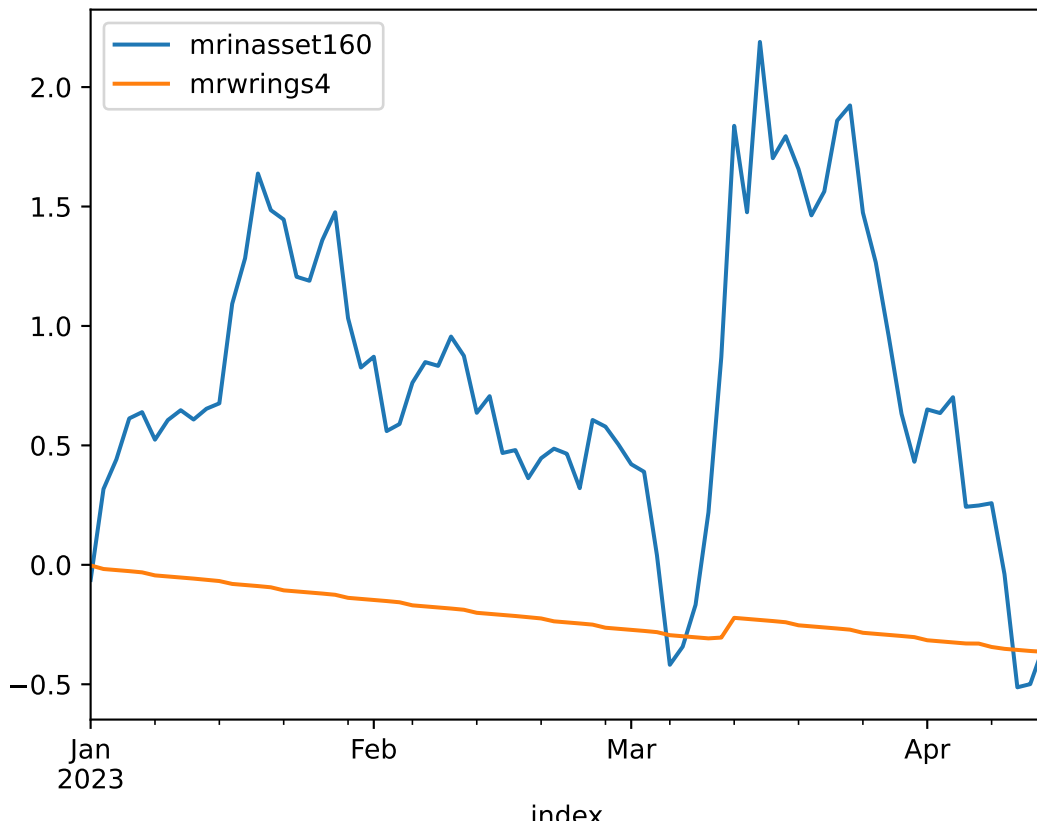
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.784, 'skewabs365': 6.707, 'skewrv180': 3.155, 'skewrv365': 2.862}
ann. std {'skewabs180': 8.007, 'skewabs365': 7.953, 'skewrv180': 6.387, 'skewrv365': 6.046}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.84, 'skewrv180': 0.49, 'skewrv365': 0.47}



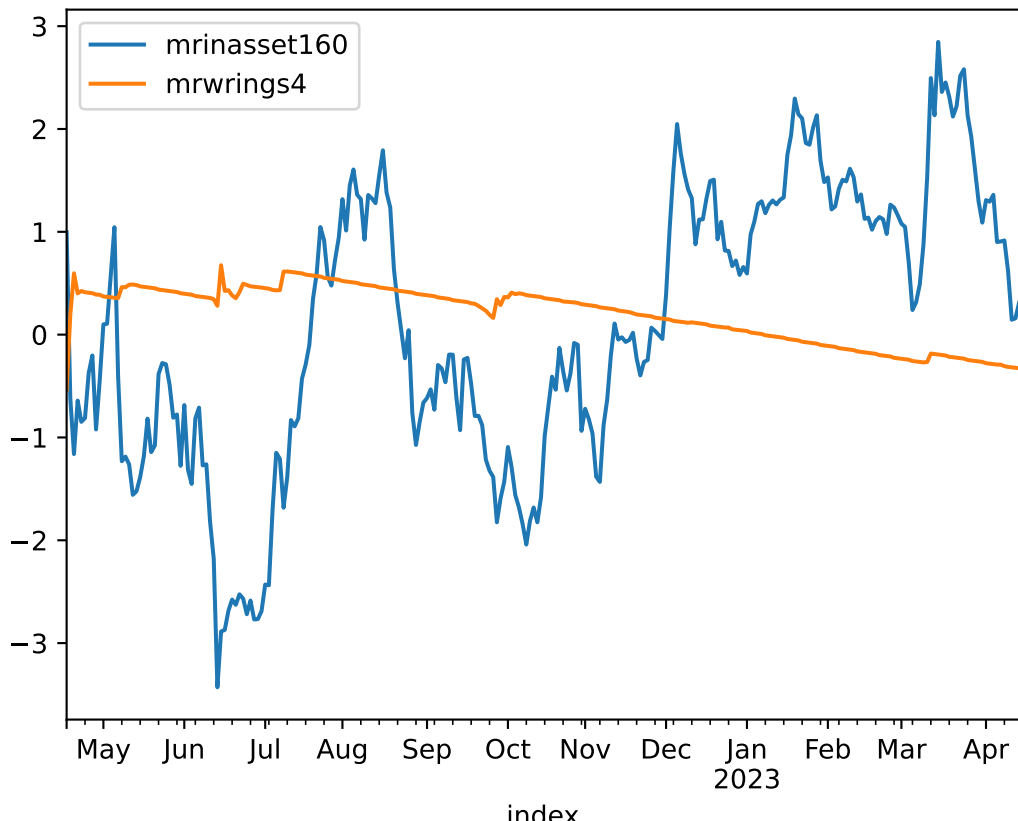
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.877, 'skewabs365': 5.547, 'skewrv180': 4.219, 'skewrv365': 2.366}
ann. std {'skewabs180': 10.102, 'skewabs365': 9.869, 'skewrv180': 8.752, 'skewrv365': 8.124}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



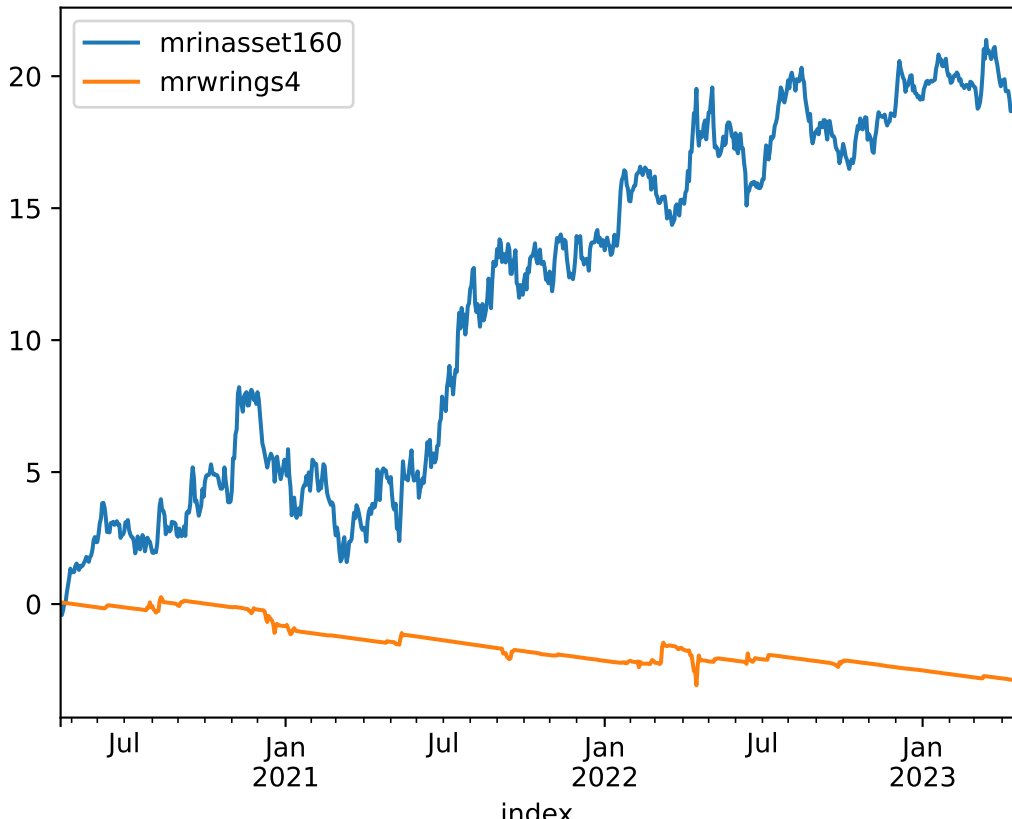
Total Trading Rule P&L for period 'YTD'
ann. mean {'mriasset160': -1.186, 'mrwrings4': -1.243}
ann. std {'mriasset160': 4.299, 'mrwrings4': 0.173}
ann. SR {'mriasset160': -0.28, 'mrwrings4': -7.17}



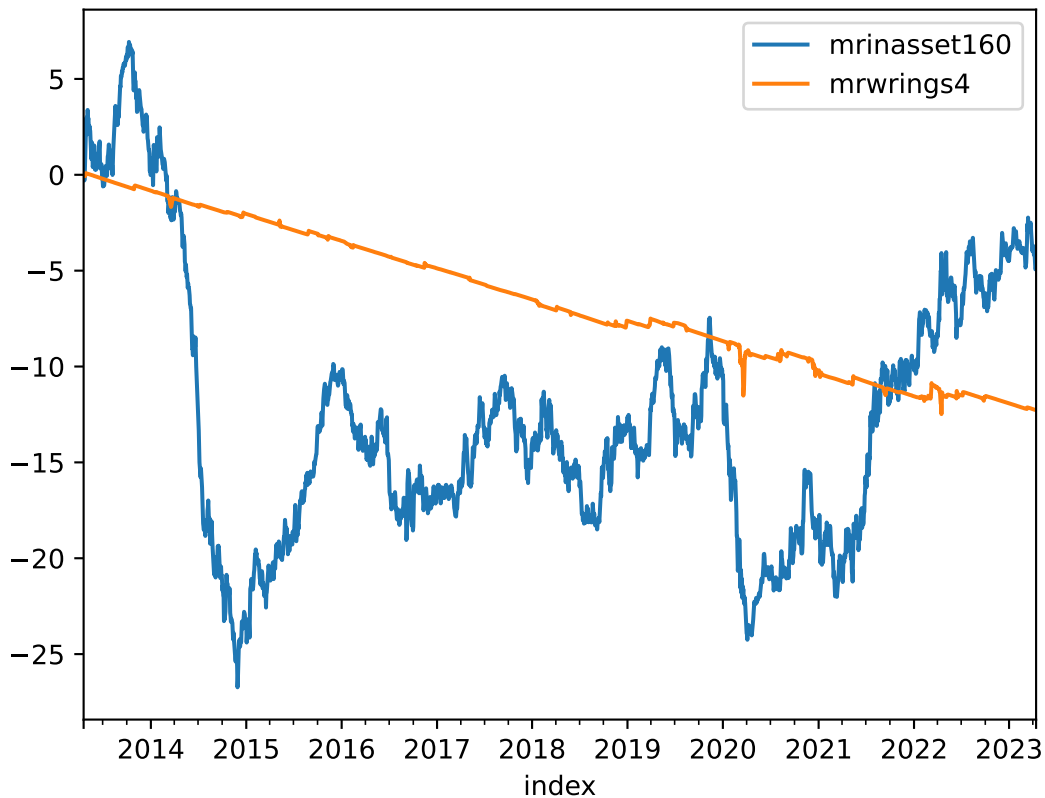
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 0.306, 'mrwrings4': -0.321}
ann. std {'mrinasset160': 5.571, 'mrwrings4': 1.16}
ann. SR {'mrinasset160': 0.05, 'mrwrings4': -0.28}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.183, 'mrwrings4': -0.942}
ann. std {'mrinasset160': 6.269, 'mrwrings4': 1.019}
ann. SR {'mrinasset160': 0.99, 'mrwrings4': -0.92}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.468, 'mrwrings4': -1.205}
ann. std {'mrinasset160': 6.229, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.08, 'mrwrings4': -1.37}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.567, 'mrwrings4': -2.132}
ann. std {'mrinasset160': 9.87, 'mrwrings4': 2.088}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.02}

