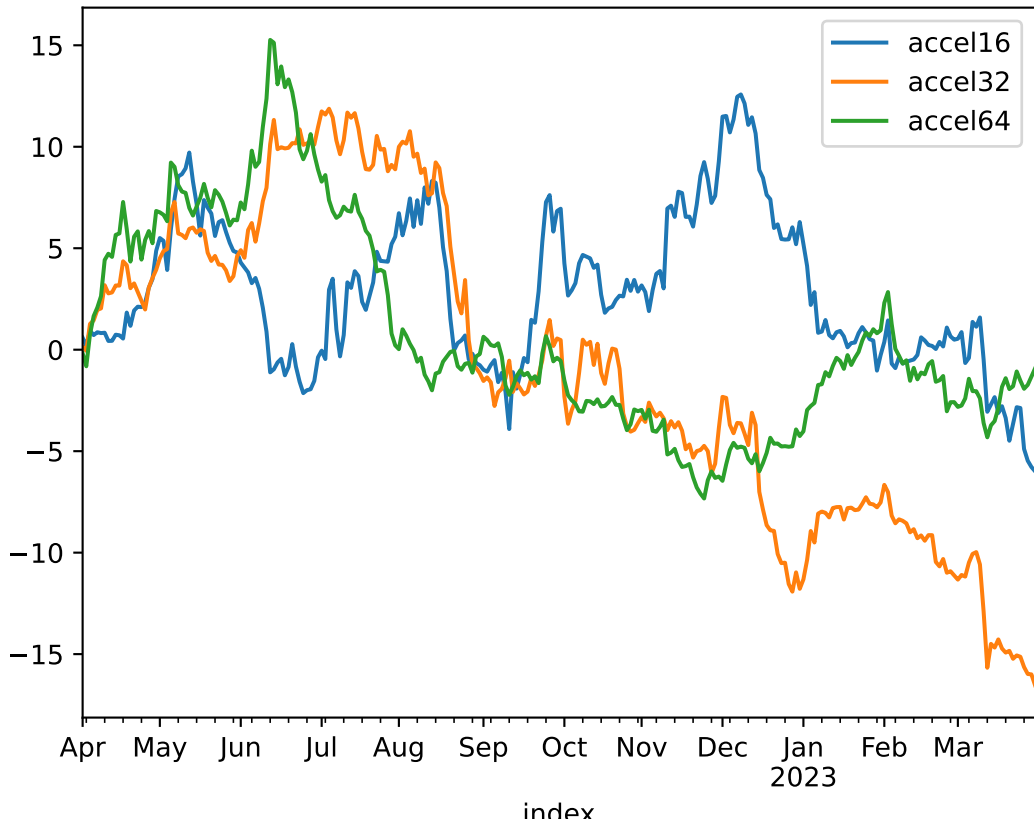


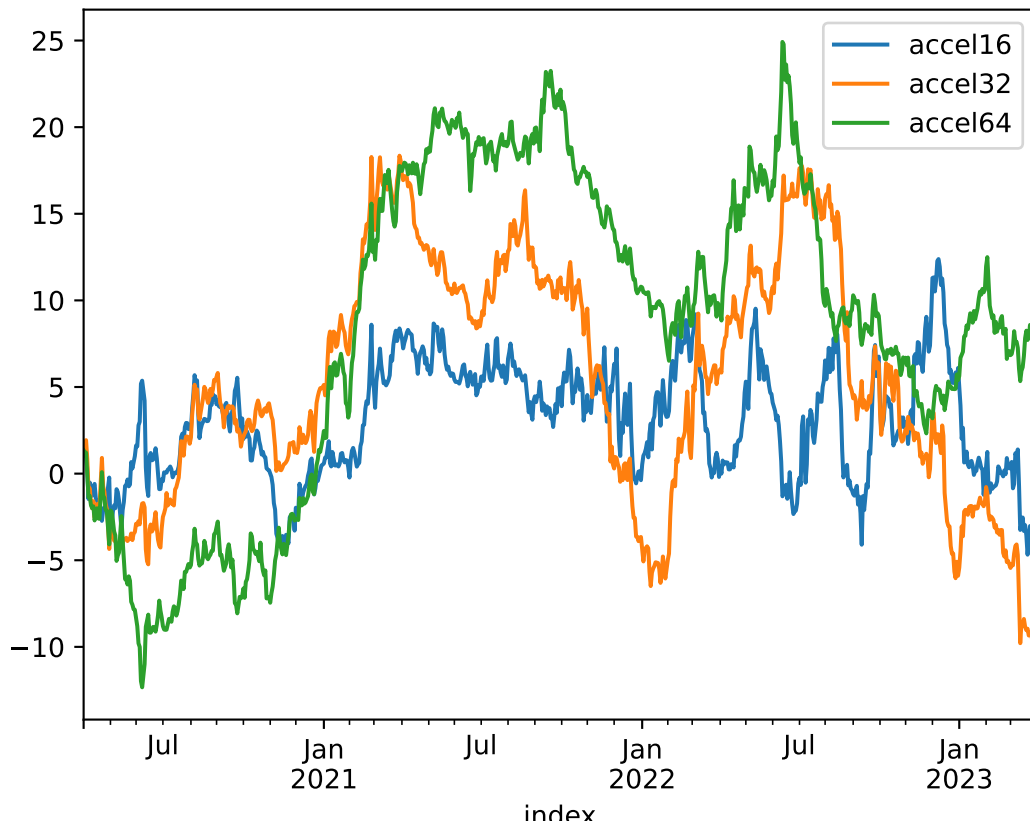
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -49.129, 'accel32': -19.019, 'accel64': 13.337}
ann. std {'accel16': 13.792, 'accel32': 10.821, 'accel64': 9.973}
ann. SR {'accel16': -3.56, 'accel32': -1.76, 'accel64': 1.34}



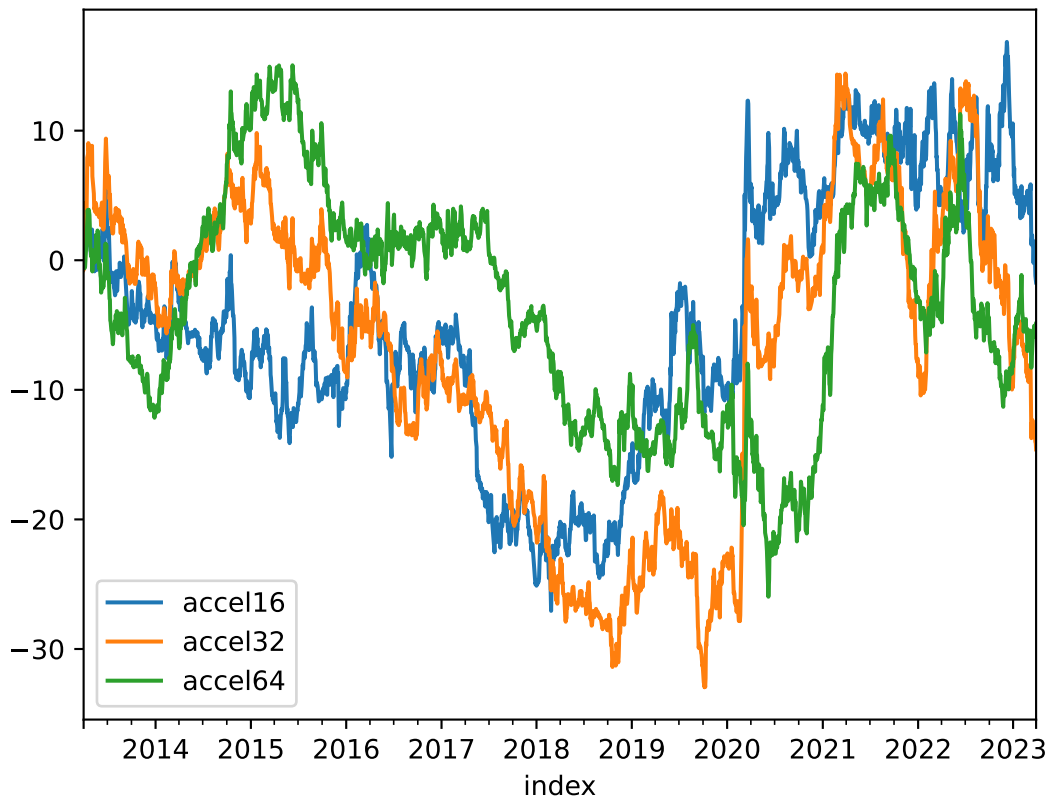
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -5.899, 'accel32': -16.282, 'accel64': -0.906}
ann. std {'accel16': 16.011, 'accel32': 13.208, 'accel64': 11.504}
ann. SR {'accel16': -0.37, 'accel32': -1.23, 'accel64': -0.08}



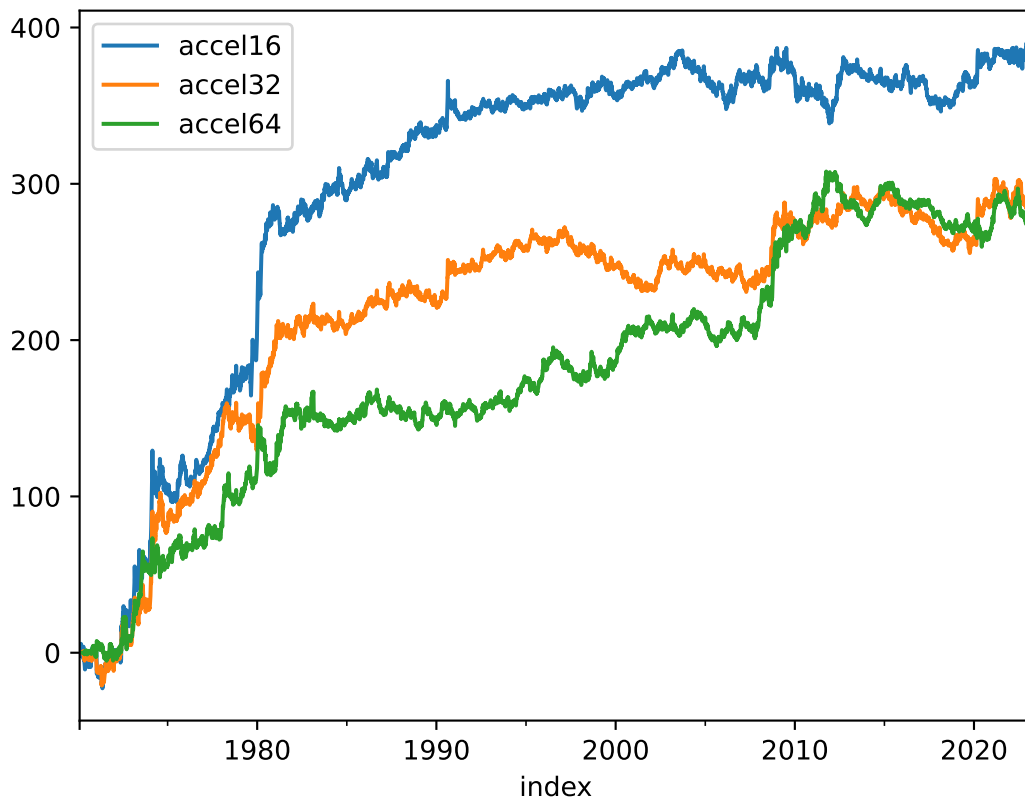
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.024, 'accel32': -3.487, 'accel64': 2.86}
ann. std {'accel16': 13.684, 'accel32': 11.956, 'accel64': 10.754}
ann. SR {'accel16': -0.15, 'accel32': -0.29, 'accel64': 0.27}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.169, 'accel32': -1.432, 'accel64': -0.481}
ann. std {'accel16': 11.719, 'accel32': 10.78, 'accel64': 9.345}
ann. SR {'accel16': -0.01, 'accel32': -0.13, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.859, 'accel32': 5.059, 'accel64': 5.183}
ann. std {'accel16': 14.135, 'accel32': 12.459, 'accel64': 12.108}
ann. SR {'accel16': 0.49, 'accel32': 0.41, 'accel64': 0.43}

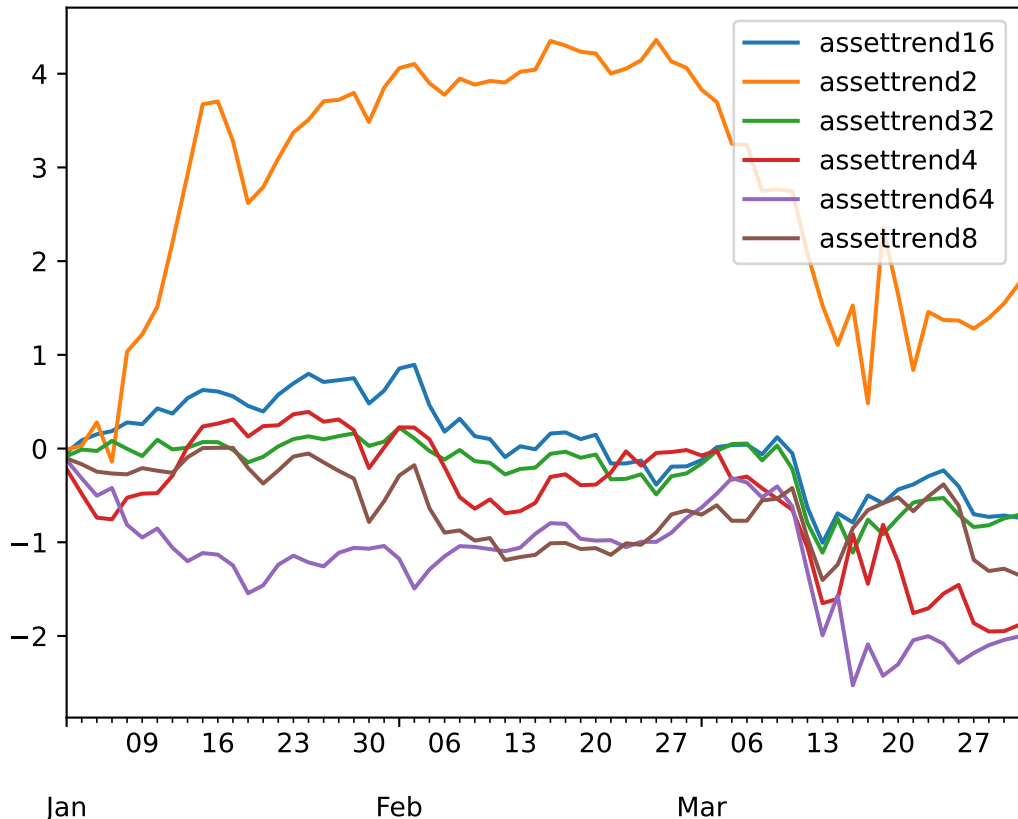


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -2.951, 'assettrend2': 7.052, 'assettrend32': -2.832, 'assettrend4': -7.53, 'assettrend8': -5.401}

ann. std {'assettrend16': 2.746, 'assettrend2': 7.16, 'assettrend32': 2.505, 'assettrend4': 3.853, 'assettrend64': 3.735, 'assettrend8': 3.026}

ann. SR {'assettrend16': -1.07, 'assettrend2': 0.98, 'assettrend32': -1.13, 'assettrend4': -1.95, 'assettrend64': -2.15, 'assettrend8': -1.79}

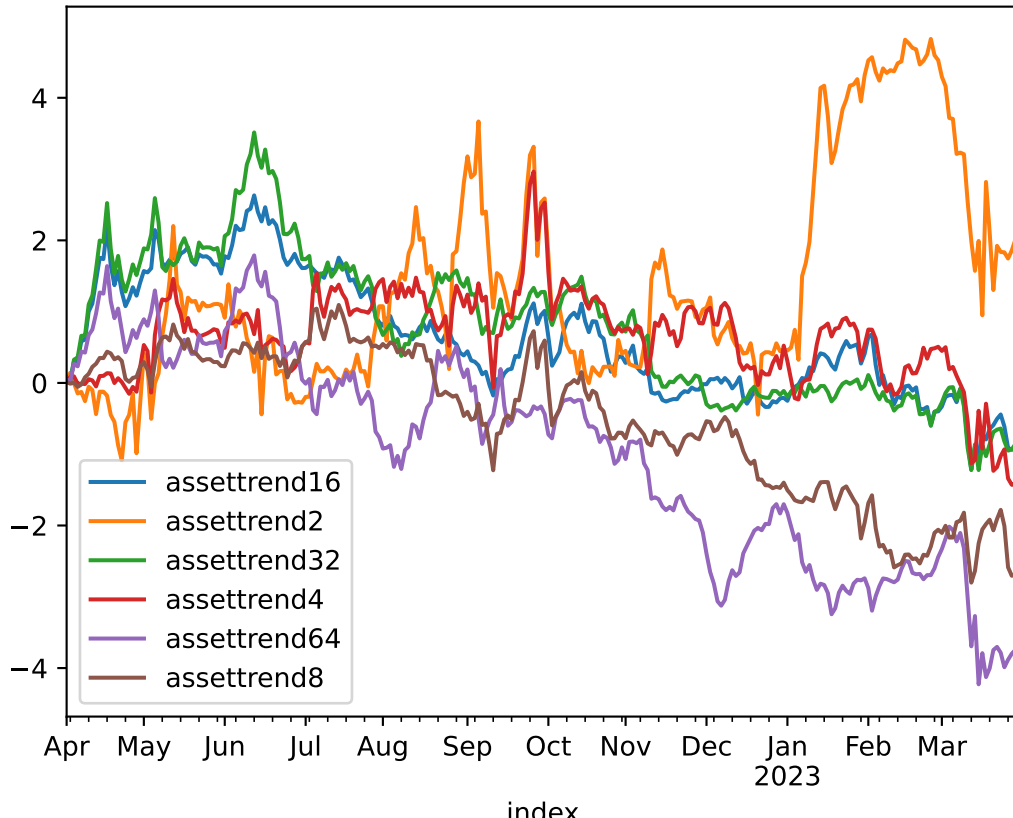


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -0.932, 'assettrend2': 2.194, 'assettrend32': -0.808, 'assettrend4': -1.338, 'assettrend64': -3.649, 'assettrend8': -2.707}

ann. std {'assettrend16': 2.528, 'assettrend2': 6.383, 'assettrend32': 2.919, 'assettrend4': 3.933, 'assettrend64': 3.283, 'assettrend8': 2.605}

ann. SR {'assettrend16': -0.37, 'assettrend2': 0.34, 'assettrend32': -0.28, 'assettrend4': -0.34, 'assettrend64': -1.11, 'assettrend8': -1.04}

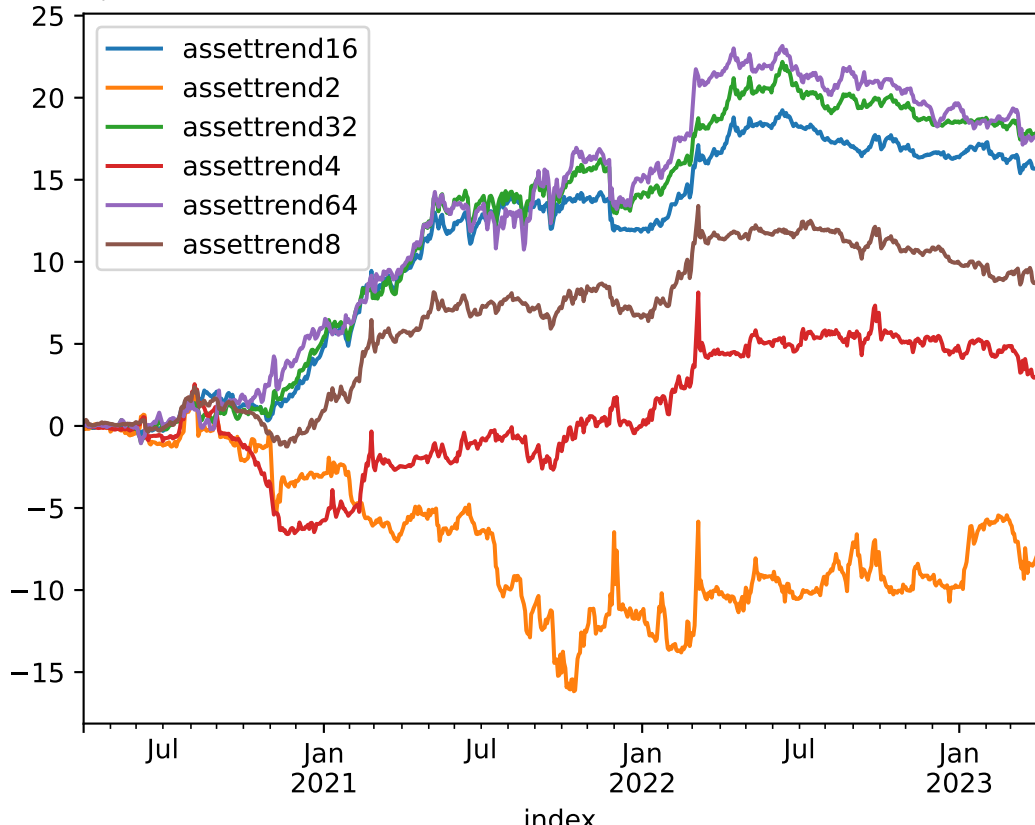


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.127, 'assettrend2': -2.631, 'assettrend32': 5.843, 'assettrend4': 0.986, 'assettrend64': 5.781, 'assettrend8': 2.836}

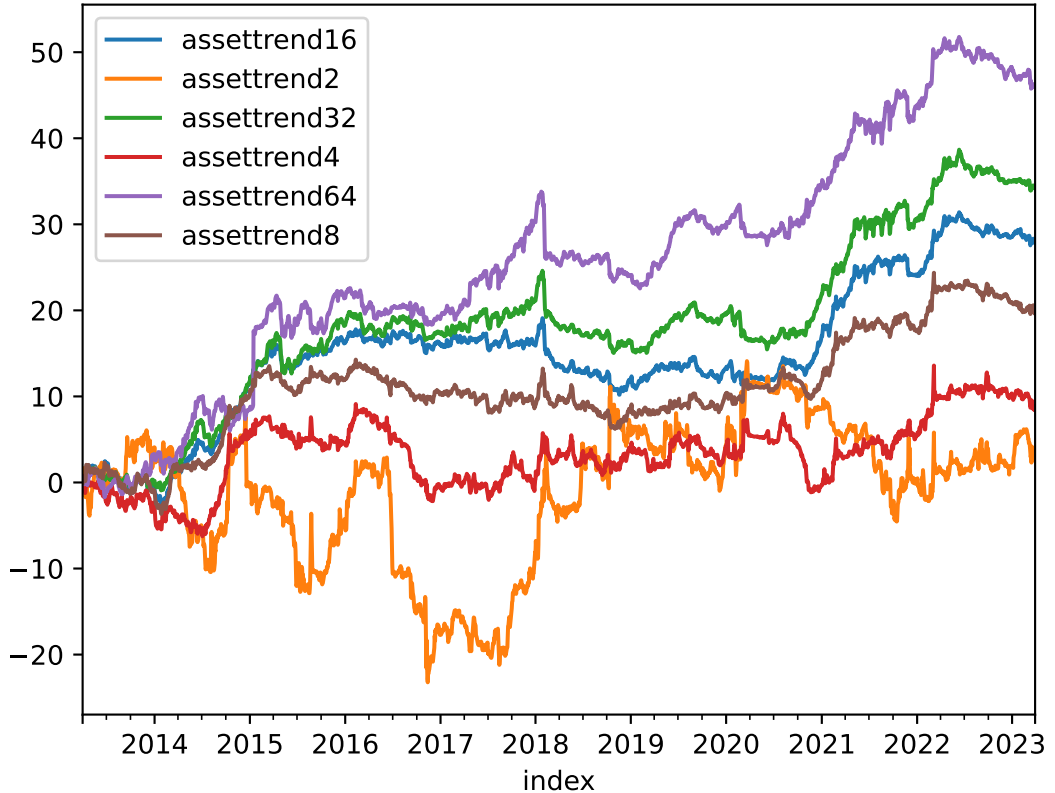
ann. std {'assettrend16': 3.404, 'assettrend2': 7.774, 'assettrend32': 4.118, 'assettrend4': 4.926, 'assettrend64': 4.992, 'assettrend8': 3.503}

ann. SR {'assettrend16': 1.51, 'assettrend2': -0.34, 'assettrend32': 1.42, 'assettrend4': 0.2, 'assettrend64': 1.16, 'assettrend8': 0.81}



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

ann. mean {'assettrend16': 2.73, 'assettrend2': 0.352, 'assettrend32': 3.369, 'assettrend4': 0.83, 'assettrend64': 4.541, 'assettrend8': 1.926}
ann. std {'assettrend16': 3.165, 'assettrend2': 9.811, 'assettrend32': 3.597, 'assettrend4': 4.994, 'assettrend64': 5.198, 'assettrend8': 3.475}
ann. SR {'assettrend16': 0.86, 'assettrend2': 0.04, 'assettrend32': 0.94, 'assettrend4': 0.17, 'assettrend64': 0.87, 'assettrend8': 0.55}

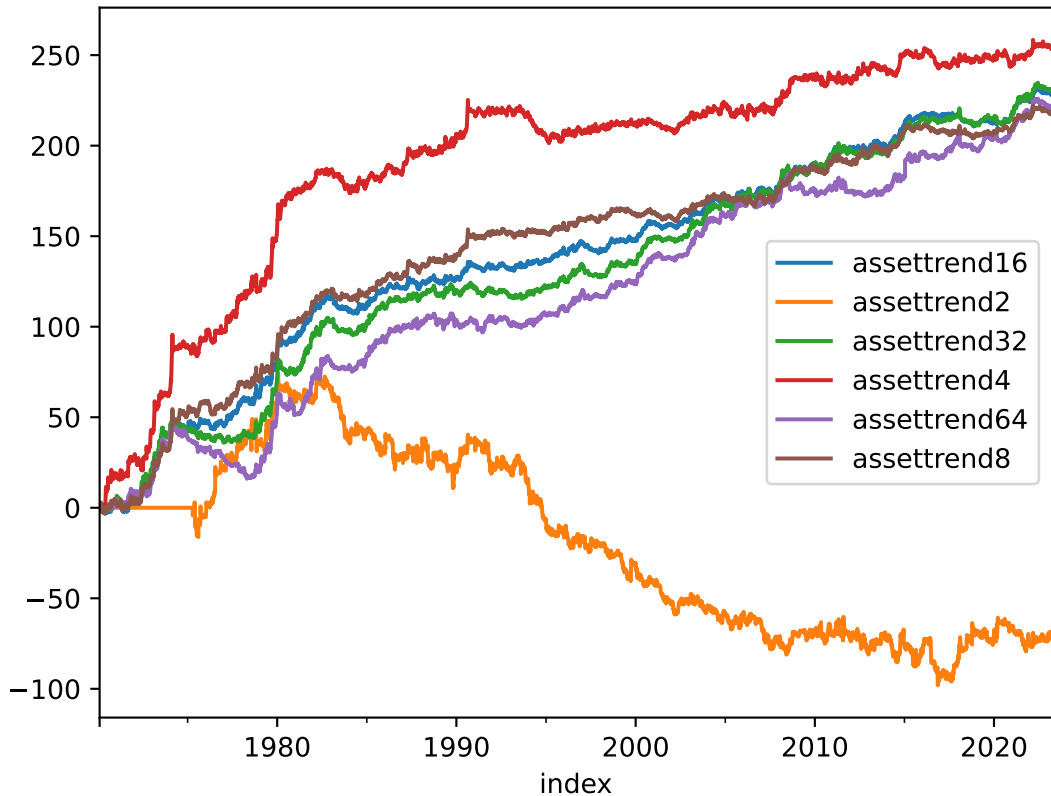


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.213, 'assettrend2': -1.315, 'assettrend32': 4.253, 'assettrend4': 4.676, 'assettrend64': 4.07, 'assettrend8': 4.013}

ann. std {'assettrend16': 4.306, 'assettrend2': 10.265, 'assettrend32': 4.497, 'assettrend4': 6.55, 'assettrend64': 4.998, 'assettrend8': 4.635}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.95, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.87}

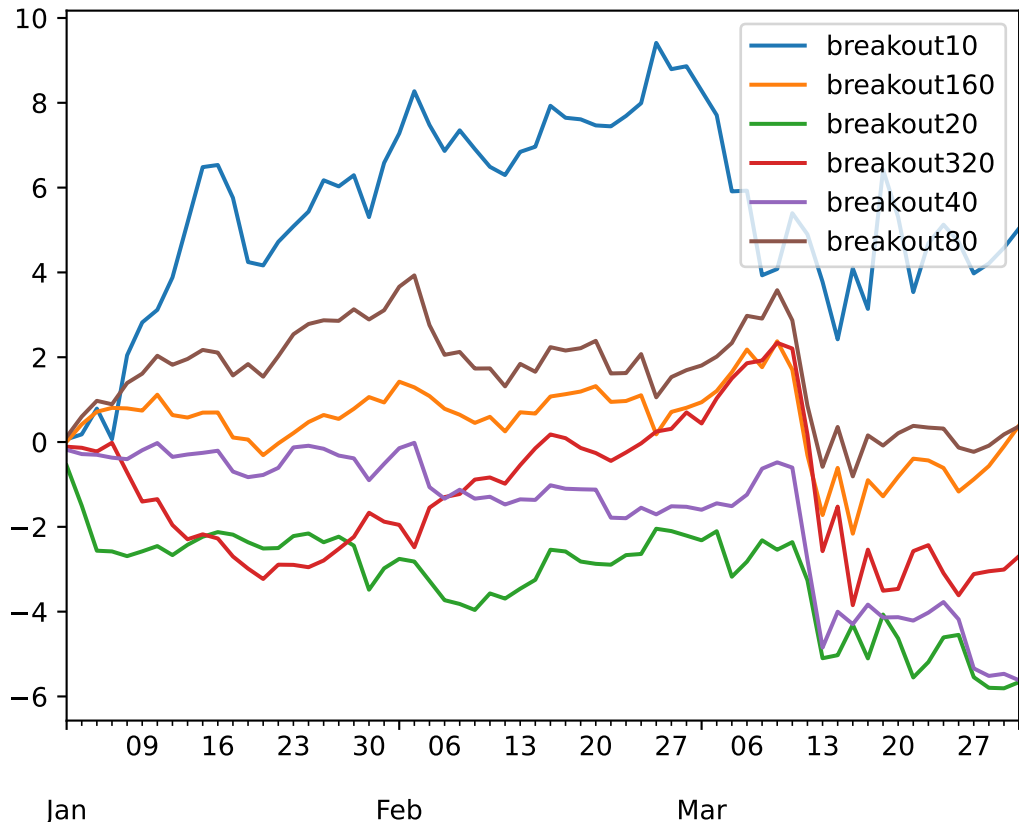


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 20.151, 'breakout160': 1.563, 'breakout20': -22.646, 'breakout320': -10.761, 'breakout40': -22.478, 'breakout80': 1.479}

ann. std {'breakout10': 15.26, 'breakout160': 8.594, 'breakout20': 8.104, 'breakout320': 10.73, 'breakout40': 7.85, 'breakout80': 8.759}

ann. SR {'breakout10': 1.32, 'breakout160': 0.18, 'breakout20': -2.79, 'breakout320': -1.0, 'breakout40': -2.86, 'breakout80': 0.17}

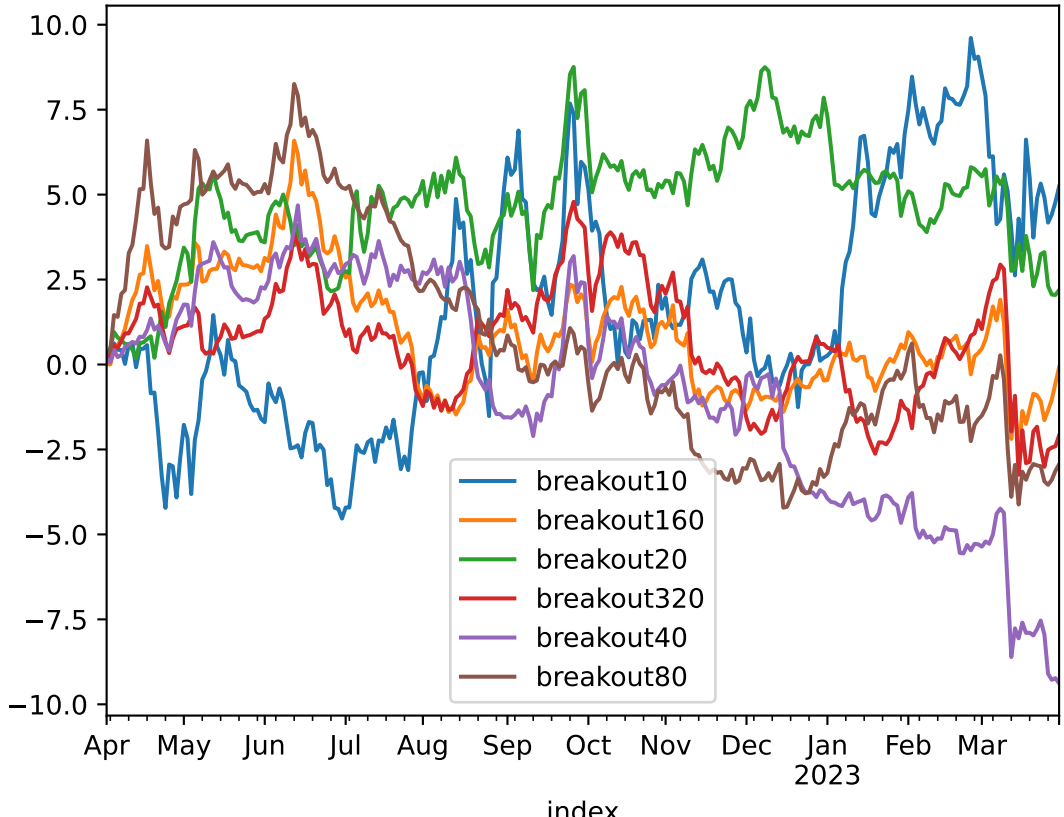


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 5.156, 'breakout160': -0.077, 'breakout20': 2.159, 'breakout320': -2.055, 'breakout40': -9.237, 'breakout80': -2.895}

ann. std {'breakout10': 13.552, 'breakout160': 7.15, 'breakout20': 8.588, 'breakout320': 7.569, 'breakout40': 7.166, 'breakout80': 7.414}

ann. SR {'breakout10': 0.38, 'breakout160': -0.01, 'breakout20': 0.25, 'breakout320': -0.27, 'breakout40': -1.29, 'breakout80': -0.39}

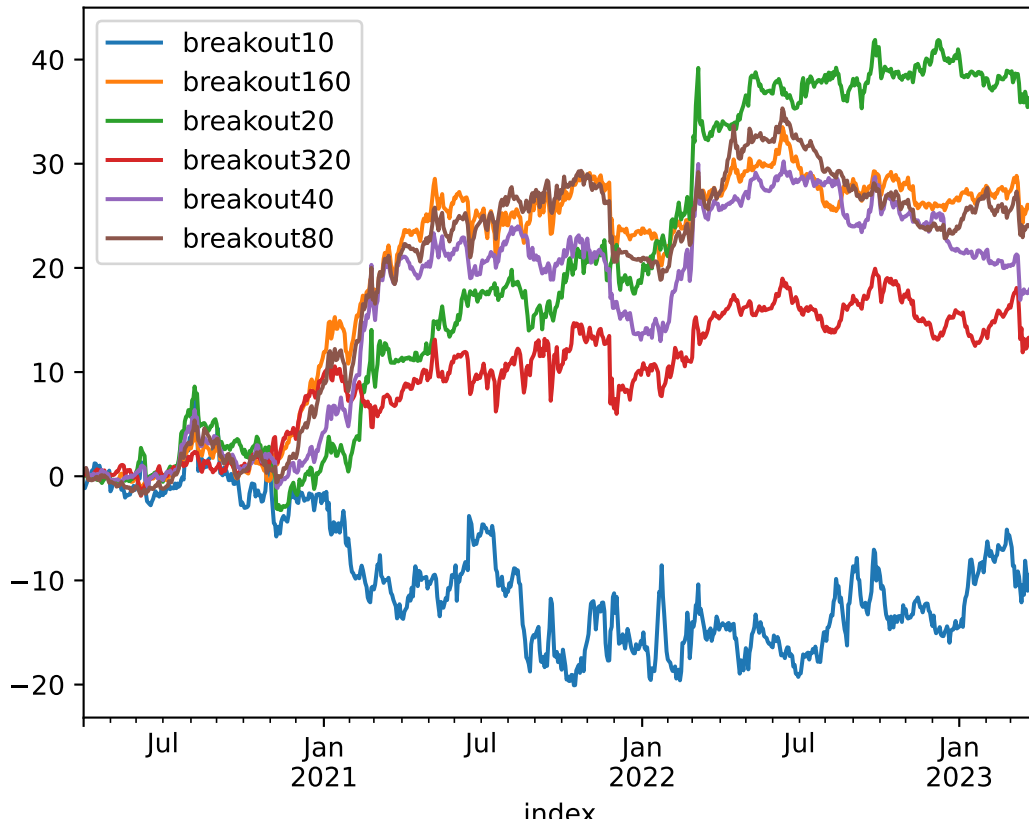


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.107, 'breakout160': 8.791, 'breakout20': 11.564, 'breakout320': 4.272, 'breakout40': 5.289, 'breakout80': 7.896}

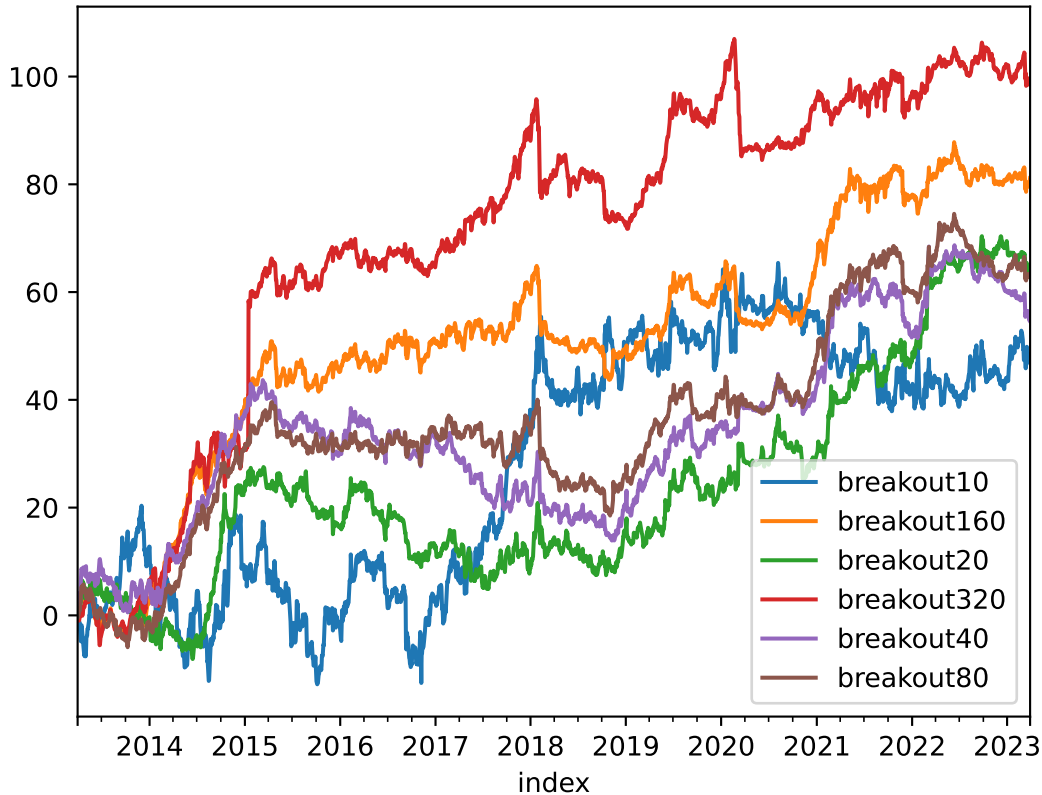
ann. std {'breakout10': 15.045, 'breakout160': 9.165, 'breakout20': 11.002, 'breakout320': 9.886, 'breakout40': 9.455, 'breakout80': 8.91}

ann. SR {'breakout10': -0.21, 'breakout160': 0.96, 'breakout20': 1.05, 'breakout320': 0.43, 'breakout40': 0.56, 'breakout80': 0.89}



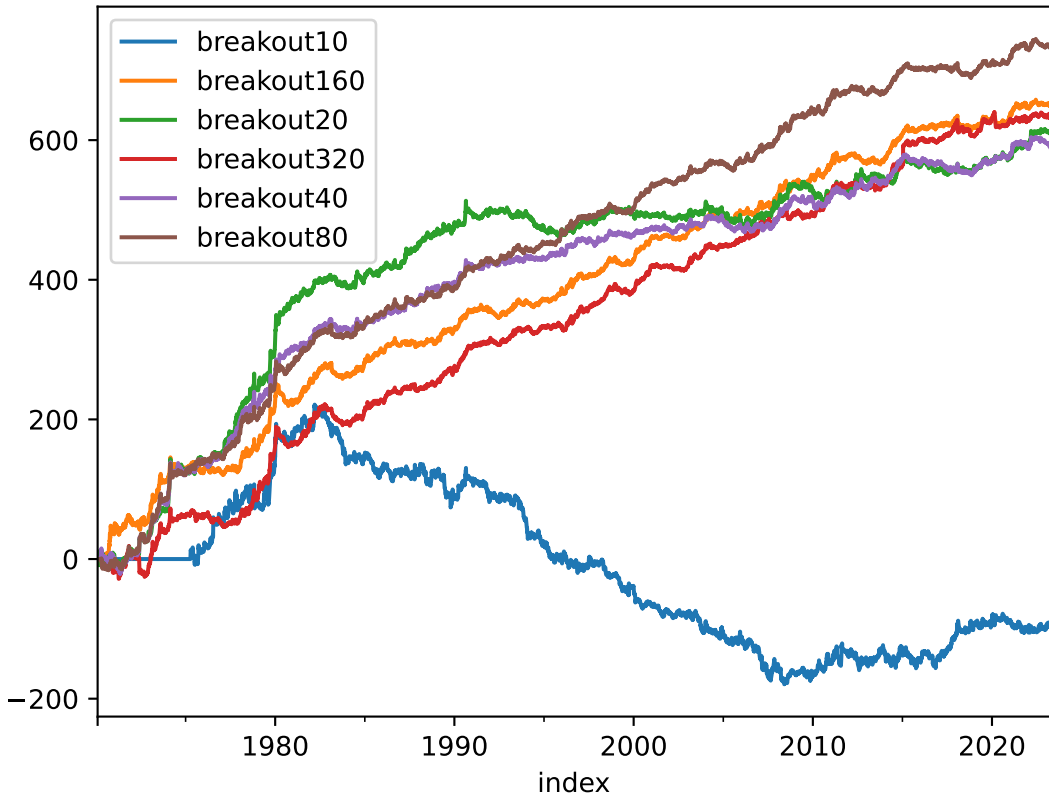
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.756, 'breakout160': 7.963, 'breakout20': 6.261, 'breakout320': 9.756, 'breakout40': 5.36, 'breakout80': 6.214}
ann. std {'breakout10': 17.888, 'breakout160': 8.885, 'breakout20': 11.136, 'breakout320': 13.094, 'breakout40': 9.481, 'breakout80': 8.766}
ann. SR {'breakout10': 0.27, 'breakout160': 0.9, 'breakout20': 0.56, 'breakout320': 0.75, 'breakout40': 0.57, 'breakout80': 0.71}



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

ann. mean {'breakout10': -1.758, 'breakout160': 12.023, 'breakout20': 11.249, 'breakout320': 11.68, 'breakout40': 10.9, 'breakout80': 13.546}
ann. std {'breakout10': 21.331, 'breakout160': 11.535, 'breakout20': 14.898, 'breakout320': 12.122, 'breakout40': 12.118, 'breakout80': 11.723}
ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.76, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.16}

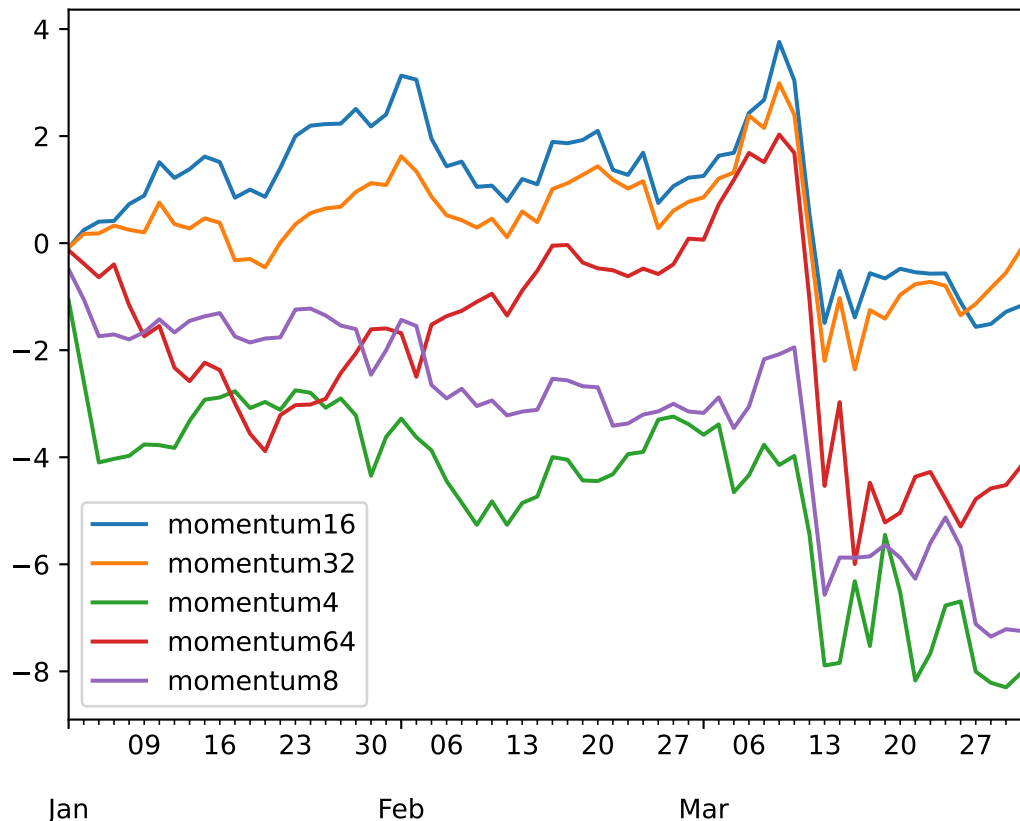


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -4.68, 'momentum32': -0.452, 'momentum4': -32.135, 'momentum64': -16.666, 'momentum8': -28.978}

ann. std {'momentum16': 9.653, 'momentum32': 9.574, 'momentum4': 12.021, 'momentum64': 13.268, 'momentum8': 9.157}

ann. SR {'momentum16': -0.48, 'momentum32': -0.05, 'momentum4': -2.67, 'momentum64': -1.26, 'momentum8': -3.16}

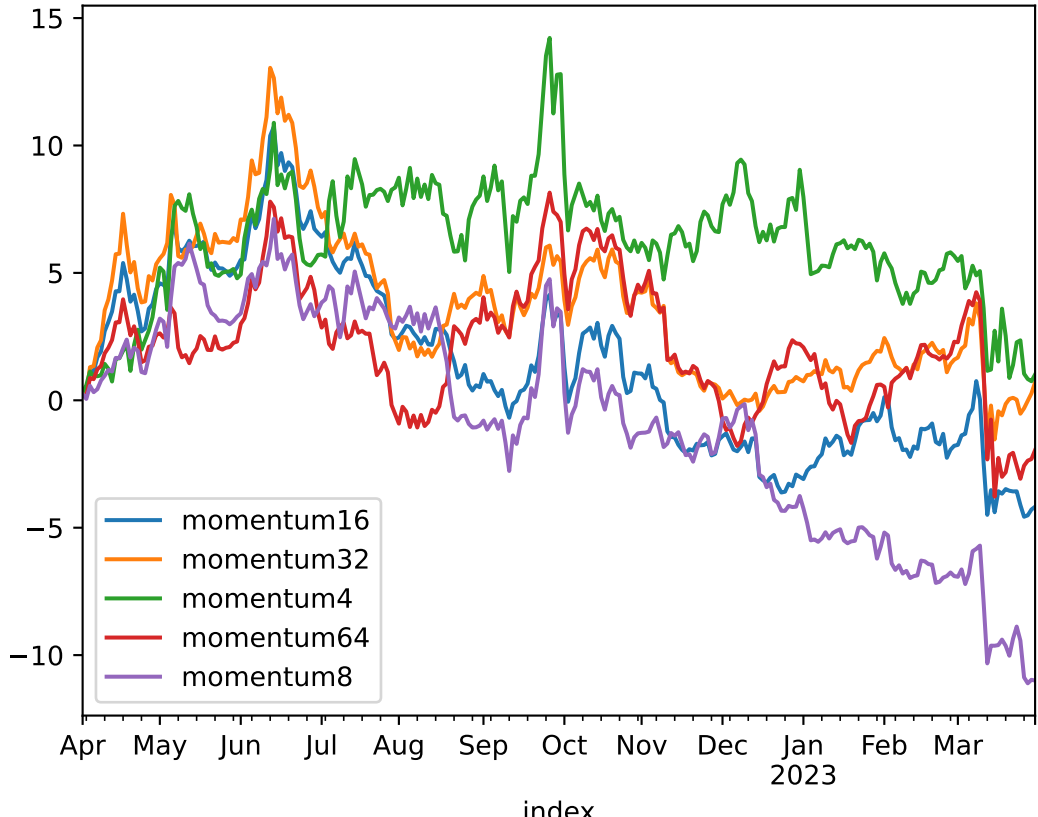


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -4.111, 'momentum32': 0.697, 'momentum4': 0.998, 'momentum64': -1.923, 'momentum8': -10.83}

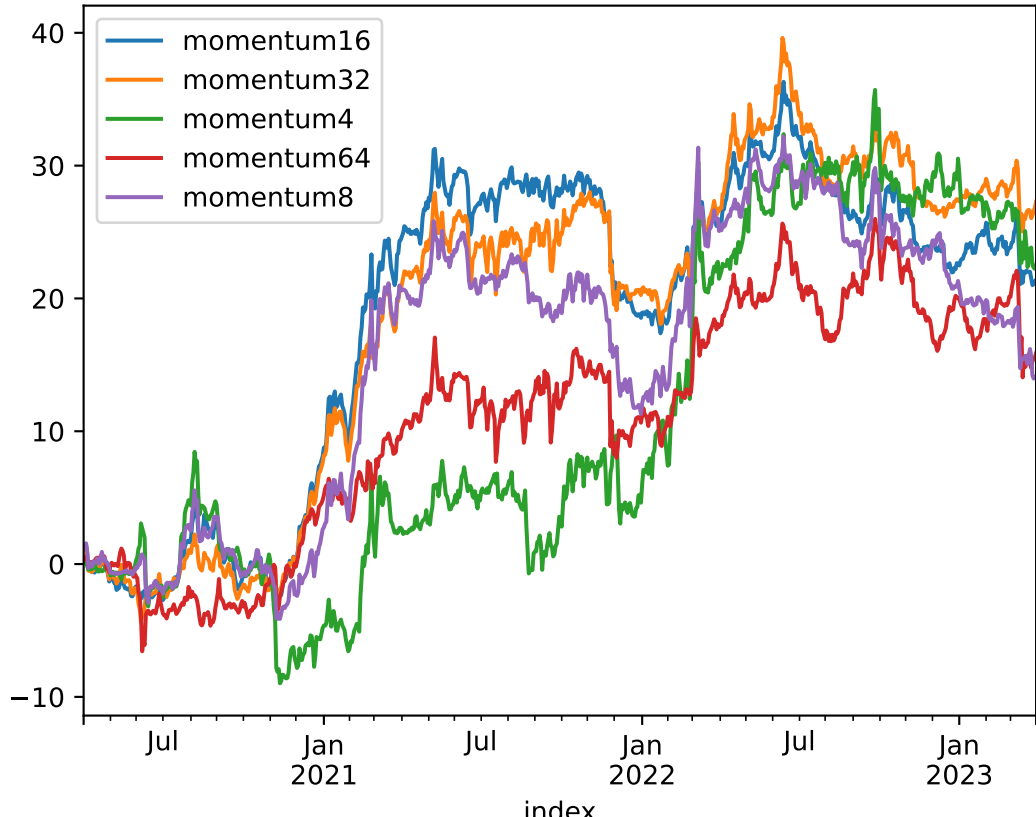
ann. std {'momentum16': 9.1, 'momentum32': 9.782, 'momentum4': 13.582, 'momentum64': 10.421, 'momentum8': 10.001}

ann. SR {'momentum16': -0.45, 'momentum32': 0.07, 'momentum4': 0.07, 'momentum64': -0.18, 'momentum8': -1.08}



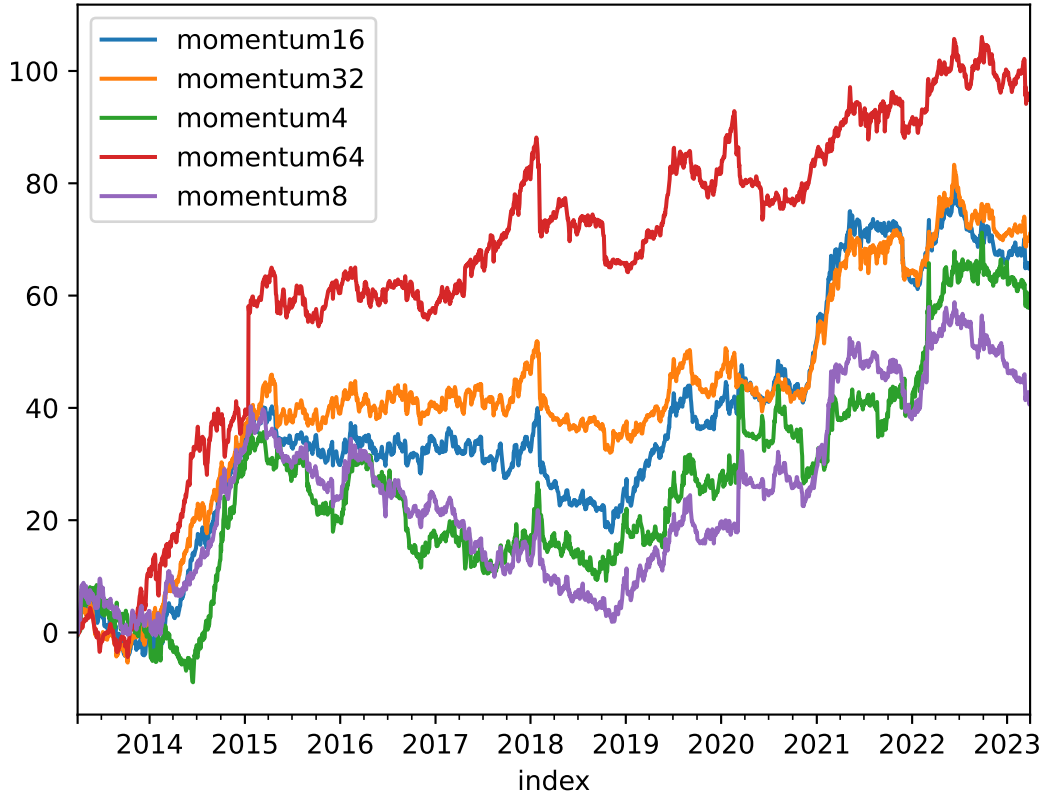
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.006, 'momentum32': 8.929, 'momentum4': 7.364, 'momentum64': 5.201, 'momentum8': 4.607}
ann. std {'momentum16': 10.185, 'momentum32': 10.408, 'momentum4': 14.593, 'momentum64': 10.82, 'momentum8': 11.432}
ann. SR {'momentum16': 0.69, 'momentum32': 0.86, 'momentum4': 0.5, 'momentum64': 0.48, 'momentum8': 0.4}



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

ann. mean {'momentum16': 6.395, 'momentum32': 6.964, 'momentum4': 5.692, 'momentum64': 9.416, 'momentum8': 3.994}
ann. std {'momentum16': 9.717, 'momentum32': 9.288, 'momentum4': 13.746, 'momentum64': 11.873, 'momentum8': 10.941}
ann. SR {'momentum16': 0.66, 'momentum32': 0.75, 'momentum4': 0.41, 'momentum64': 0.79, 'momentum8': 0.37}

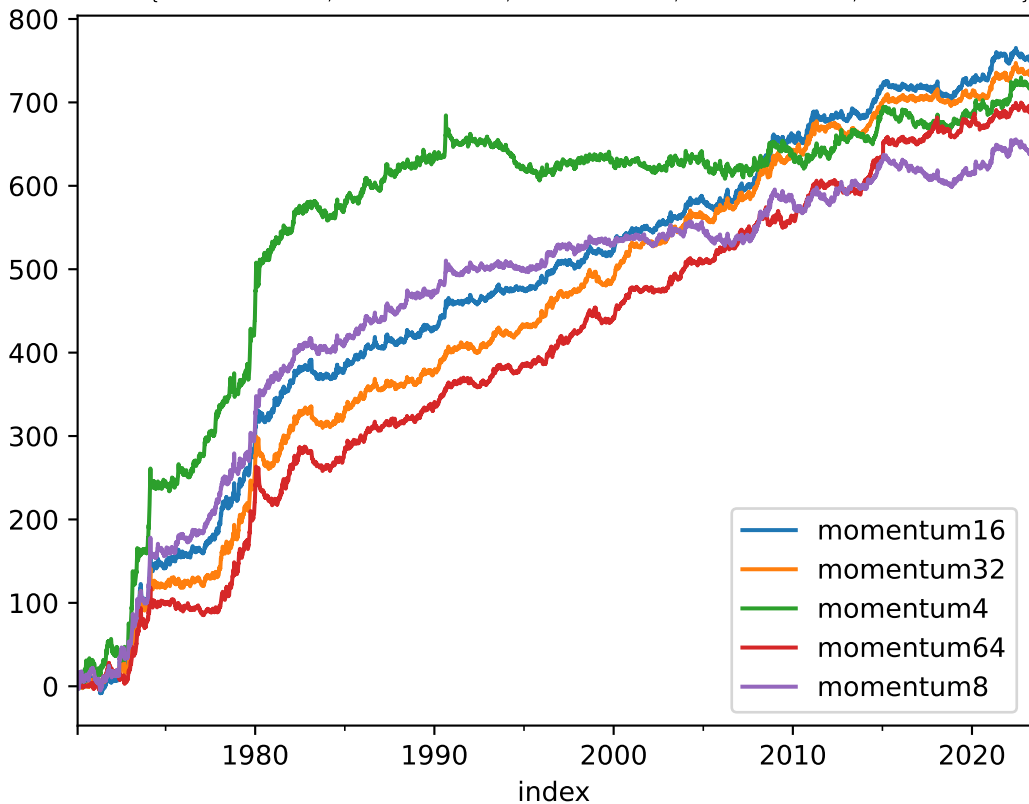


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.853, 'momentum32': 13.567, 'momentum4': 13.23, 'momentum64': 12.733, 'momentum8': 11.769}

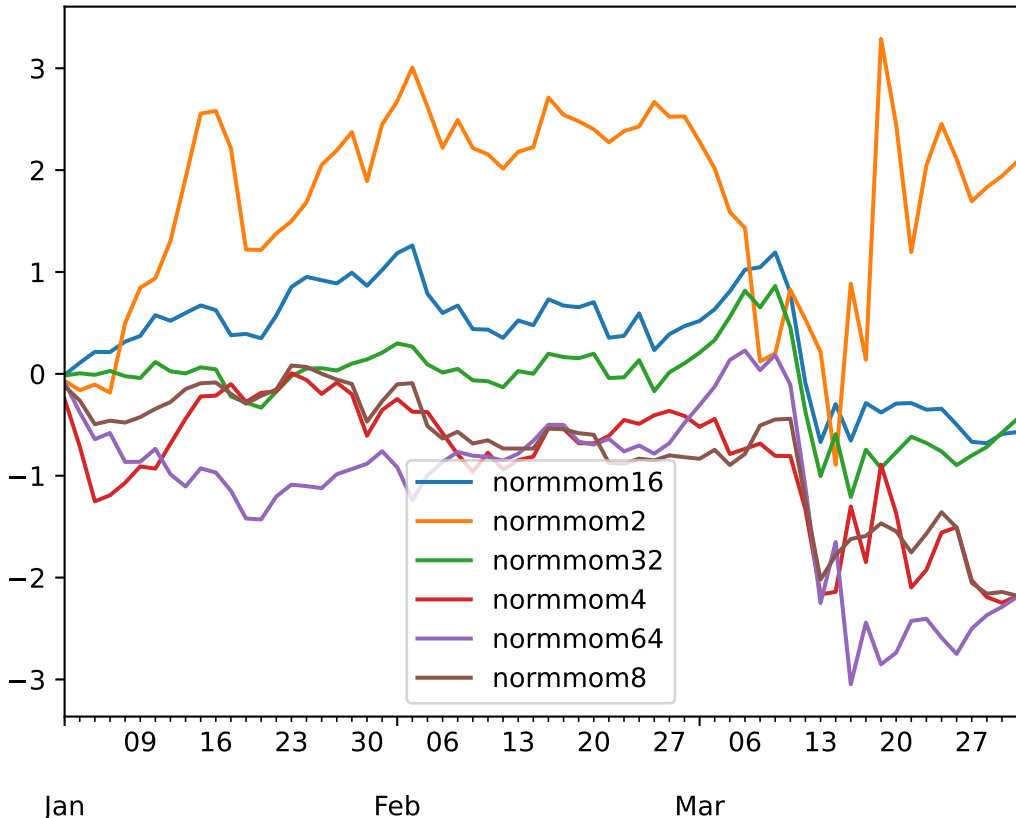
ann. std {'momentum16': 13.054, 'momentum32': 12.616, 'momentum4': 17.902, 'momentum64': 12.338, 'momentum8': 14.338}

ann. SR {'momentum16': 1.06, 'momentum32': 1.08, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}



Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -2.287, 'normmom2': 8.33, 'normmom32': -1.778, 'normmom4': -8.724, 'normmom64': -8.761, 'normmom8': -8.71}
 ann. std {'normmom16': 3.503, 'normmom2': 10.171, 'normmom32': 3.449, 'normmom4': 4.813, 'normmom64': 5.173, 'normmom8': 3.261}
 ann. SR {'normmom16': -0.65, 'normmom2': 0.82, 'normmom32': -0.52, 'normmom4': -1.81, 'normmom64': -1.69, 'normmom8': -2.67}

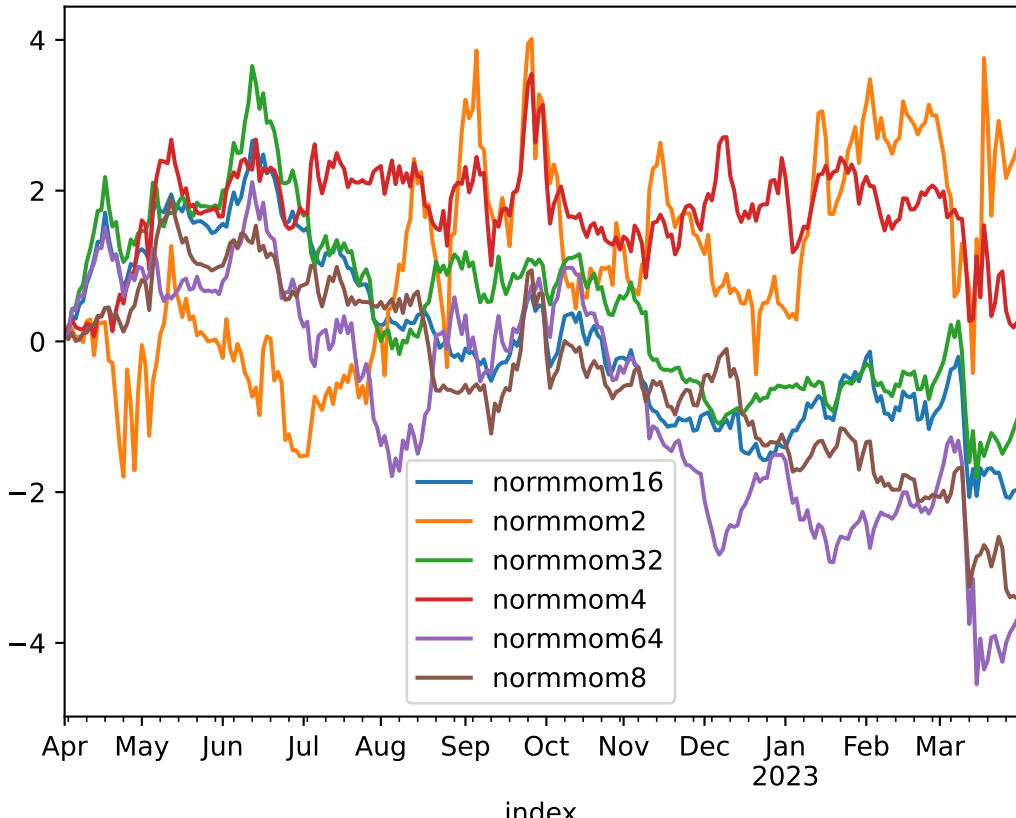


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -1.938, 'normmom2': 2.515, 'normmom32': -1.025, 'normmom4': 0.248, 'normmom64': -3.635, 'normmom8': -3.359}

ann. std {'normmom16': 2.726, 'normmom2': 7.831, 'normmom32': 3.06, 'normmom4': 4.339, 'normmom64': 3.885, 'normmom8': 2.945}

ann. SR {'normmom16': -0.71, 'normmom2': 0.32, 'normmom32': -0.34, 'normmom4': 0.06, 'normmom64': -0.94, 'normmom8': -1.14}

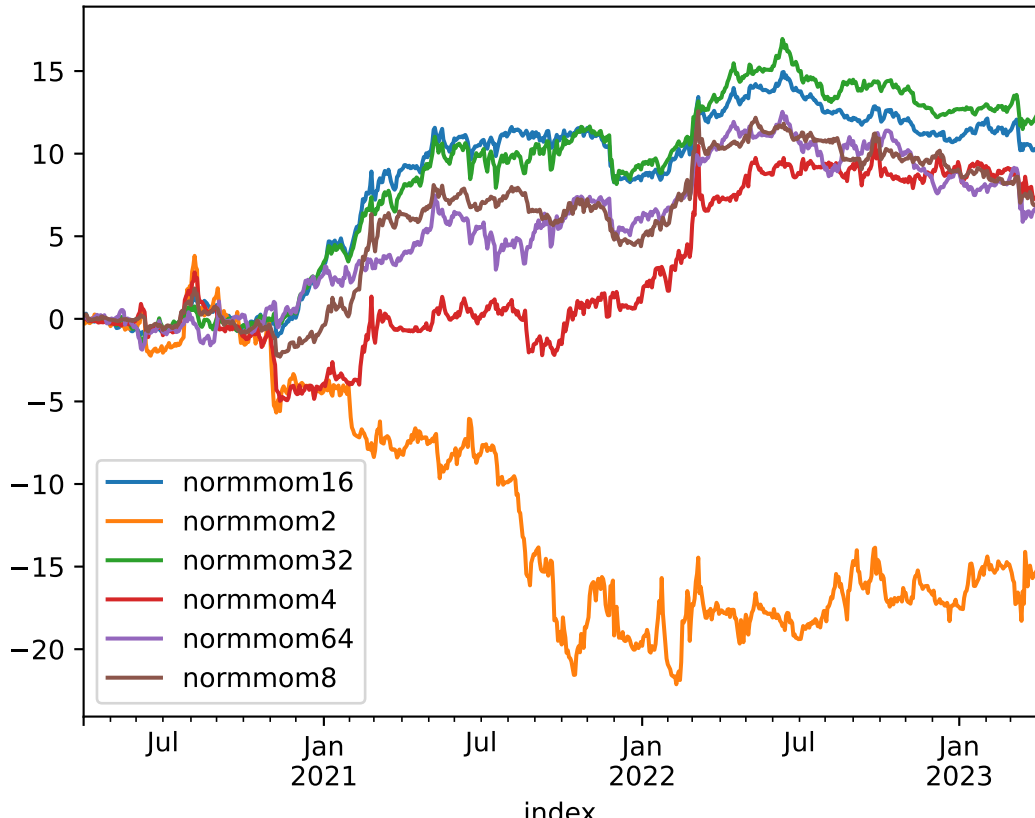


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.372, 'normmom2': -5.012, 'normmom32': 4.011, 'normmom4': 2.396, 'normmom64': 2.202, 'normmom8': 2.249}

ann. std {'normmom16': 3.512, 'normmom2': 8.604, 'normmom32': 3.881, 'normmom4': 5.345, 'normmom64': 4.274, 'normmom8': 3.915}

ann. SR {'normmom16': 0.96, 'normmom2': -0.58, 'normmom32': 1.03, 'normmom4': 0.45, 'normmom64': 0.52, 'normmom8': 0.57}

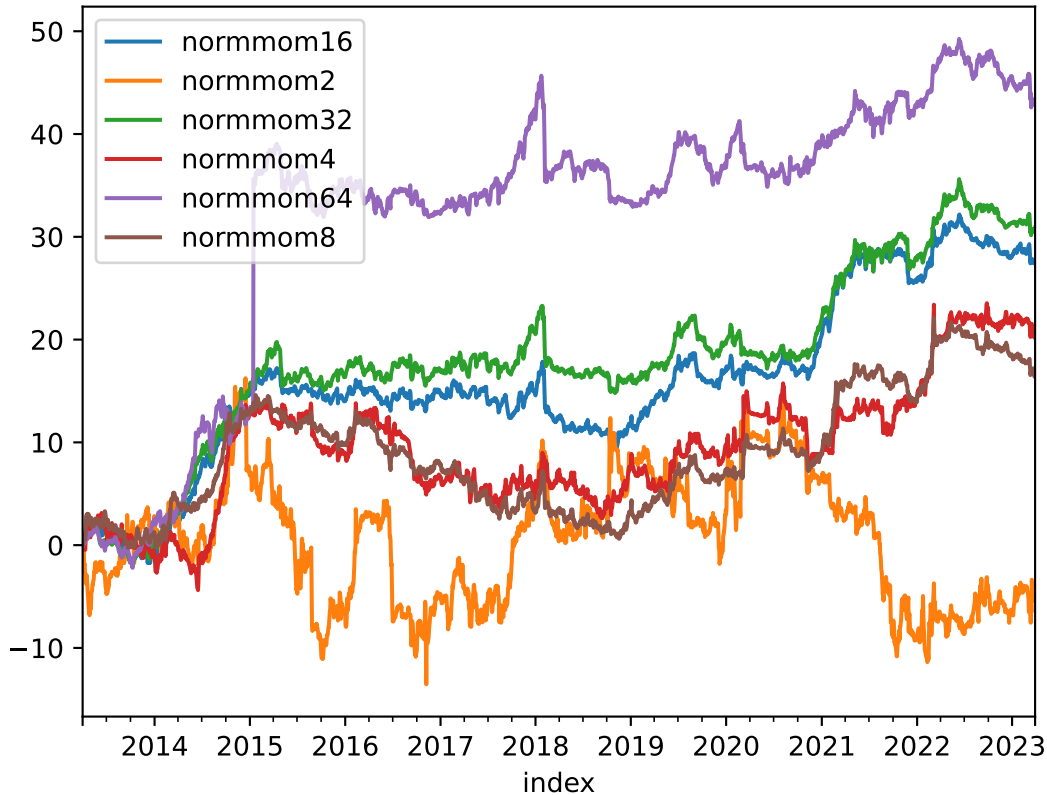


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.701, 'normmom2': -0.448, 'normmom32': 3.034, 'normmom4': 1.986, 'normmom64': 4.263, 'normmom8': 1.608}

ann. std {'normmom16': 3.492, 'normmom2': 10.365, 'normmom32': 3.632, 'normmom4': 5.469, 'normmom64': 8.271, 'normmom8': 3.915}

ann. SR {'normmom16': 0.77, 'normmom2': -0.04, 'normmom32': 0.84, 'normmom4': 0.36, 'normmom64': 0.52, 'normmom8': 0.41}

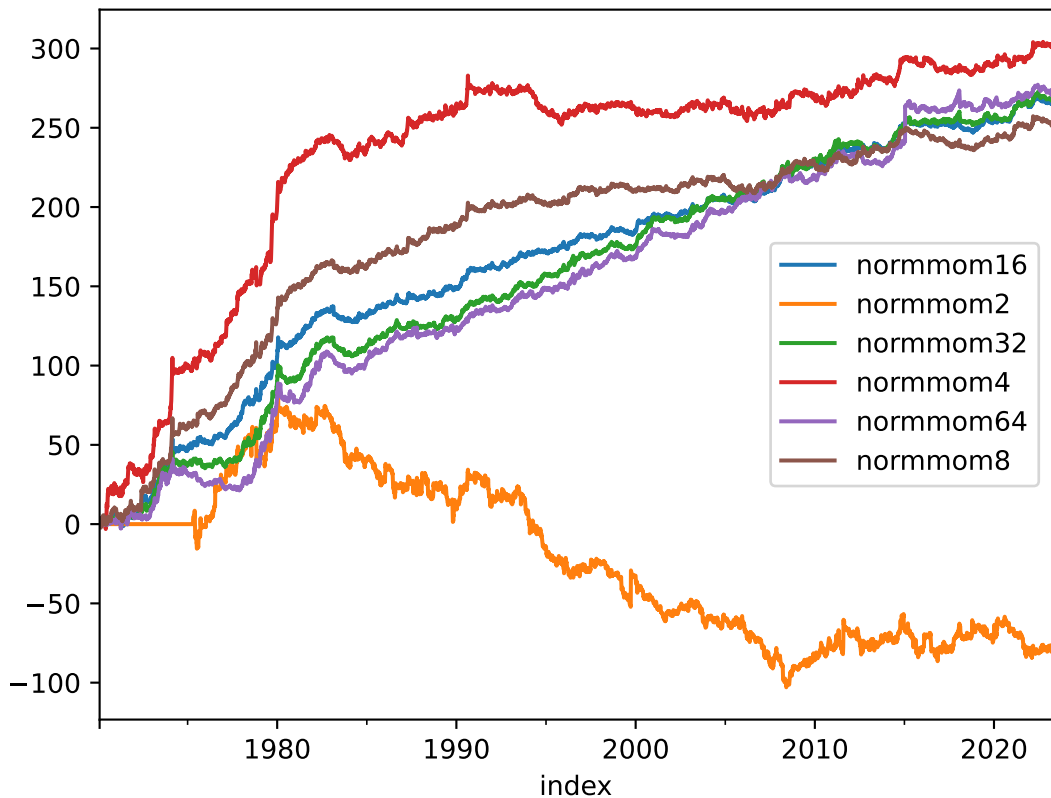


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.893, 'normmom2': -1.431, 'normmom32': 4.945, 'normmom4': 5.554, 'normmom64': 5.009, 'normmom8': 4.644}

ann. std {'normmom16': 4.535, 'normmom2': 11.617, 'normmom32': 4.612, 'normmom4': 7.388, 'normmom64': 5.873, 'normmom8': 5.368}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.87}

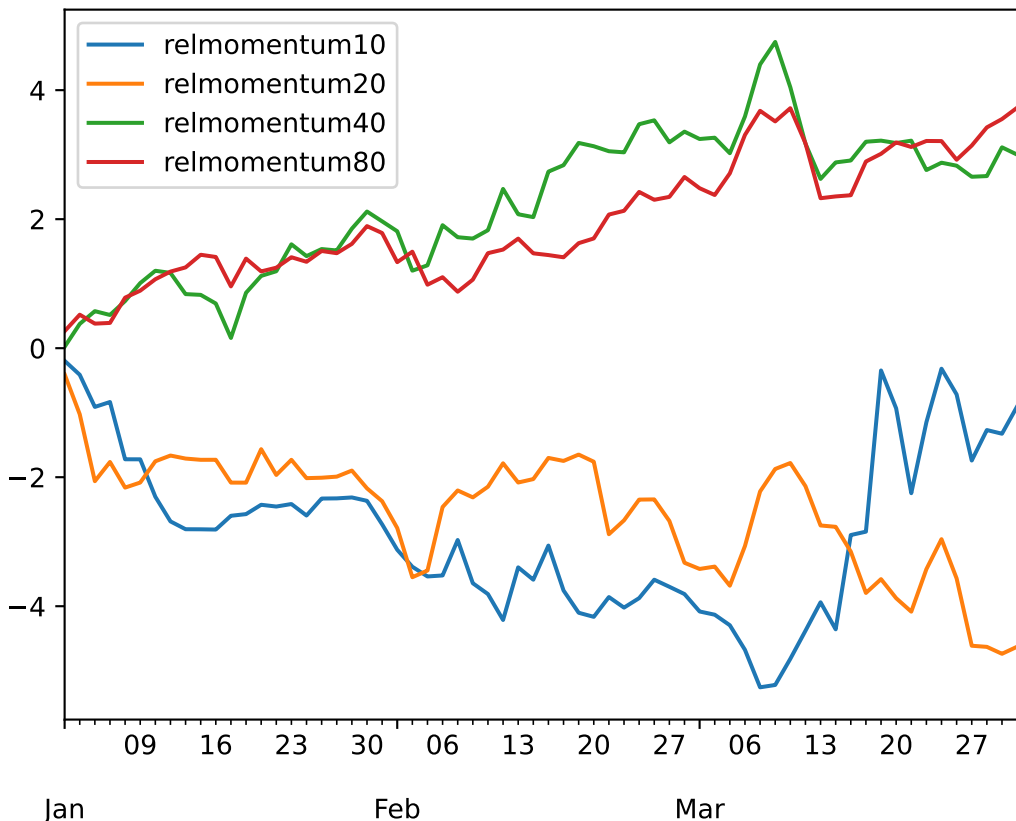


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -3.614, 'relmomentum20': -18.513, 'relmomentum40': 12.004, 'relmomentum80': 14.909}

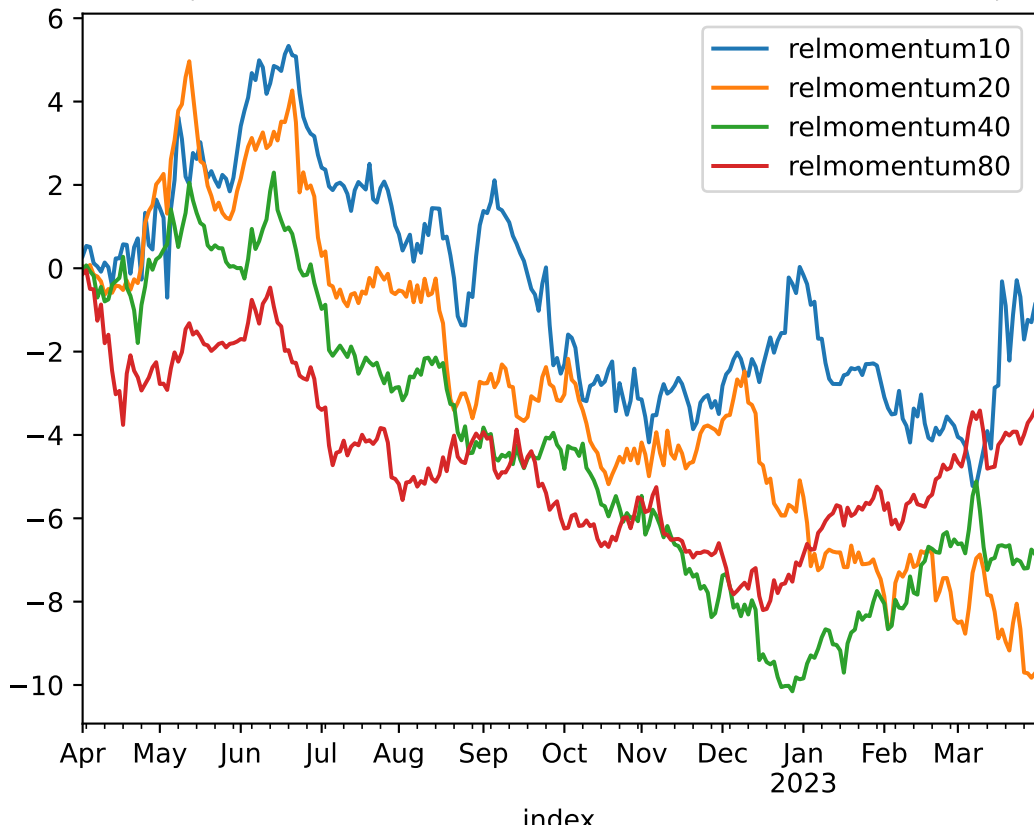
ann. std {'relmomentum10': 9.066, 'relmomentum20': 6.778, 'relmomentum40': 5.454, 'relmomentum80': 4.212}

ann. SR {'relmomentum10': -0.4, 'relmomentum20': -2.73, 'relmomentum40': 2.2, 'relmomentum80': 3.54}



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

ann. mean {'relmomentum10': -0.859, 'relmomentum20': -9.567, 'relmomentum40': -6.757, 'relmomentum80': -3.354}
ann. std {'relmomentum10': 8.35, 'relmomentum20': 6.579, 'relmomentum40': 5.479, 'relmomentum80': 4.949}
ann. SR {'relmomentum10': -0.1, 'relmomentum20': -1.45, 'relmomentum40': -1.23, 'relmomentum80': -0.68}

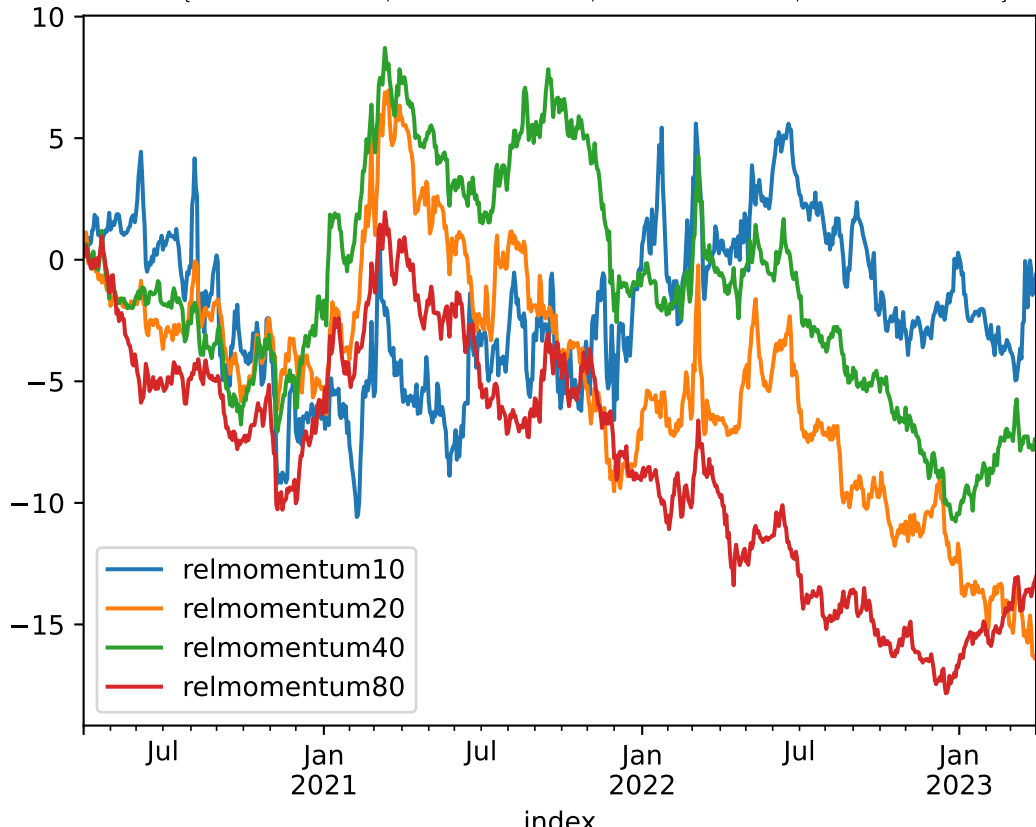


Total Trading Rule P&L for period '3Y'

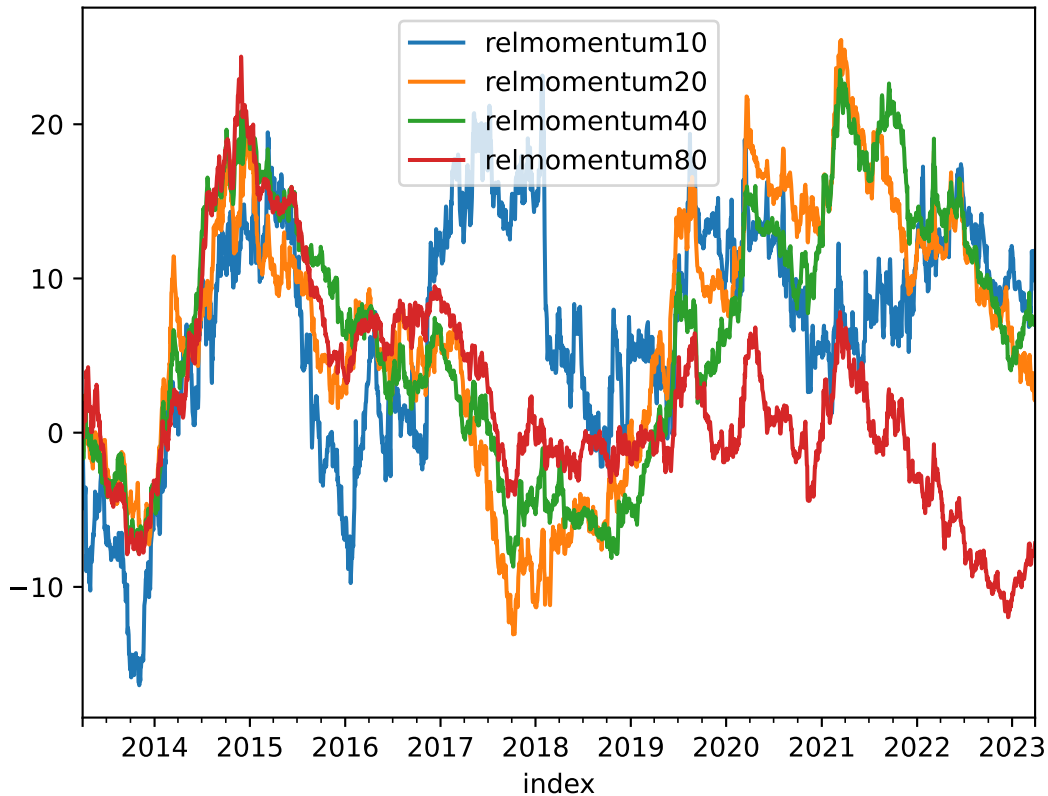
ann. mean {'relmomentum10': -0.2, 'relmomentum20': -5.336, 'relmomentum40': -2.449, 'relmomentum80': -4.268}

ann. std {'relmomentum10': 11.926, 'relmomentum20': 8.347, 'relmomentum40': 6.976, 'relmomentum80': 6.352}

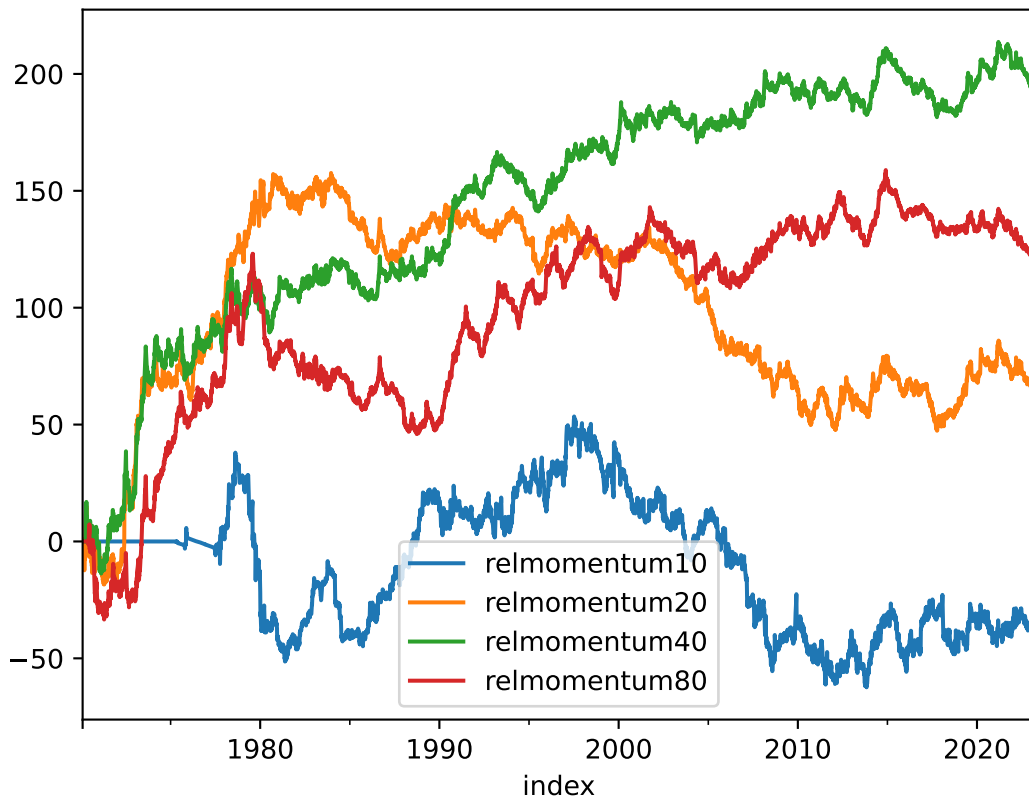
ann. SR {'relmomentum10': -0.02, 'relmomentum20': -0.64, 'relmomentum40': -0.35, 'relmomentum80': -0.67}



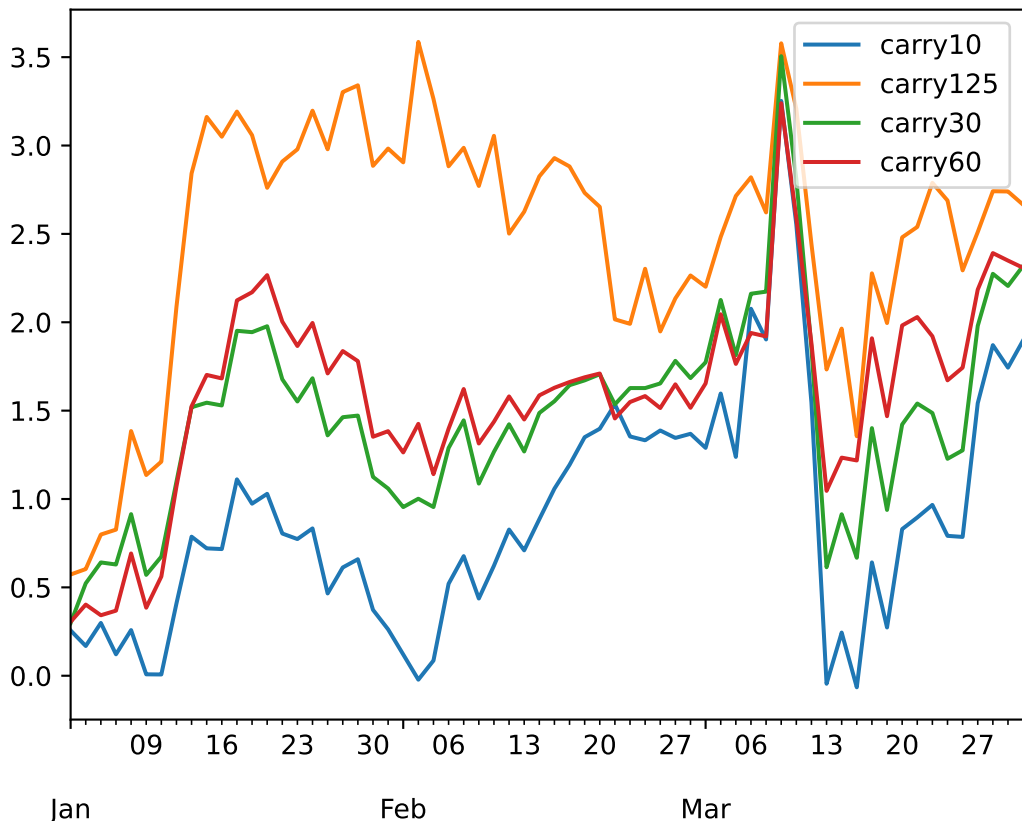
Total Trading Rule P&L for period '10Y'
ann. mean {'relmomentum10': 1.1, 'relmomentum20': 0.216, 'relmomentum40': 0.719, 'relmomentum80': -0.704}
ann. std {'relmomentum10': 13.51, 'relmomentum20': 8.655, 'relmomentum40': 7.069, 'relmomentum80': 6.456}
ann. SR {'relmomentum10': 0.08, 'relmomentum20': 0.02, 'relmomentum40': 0.1, 'relmomentum80': -0.11}



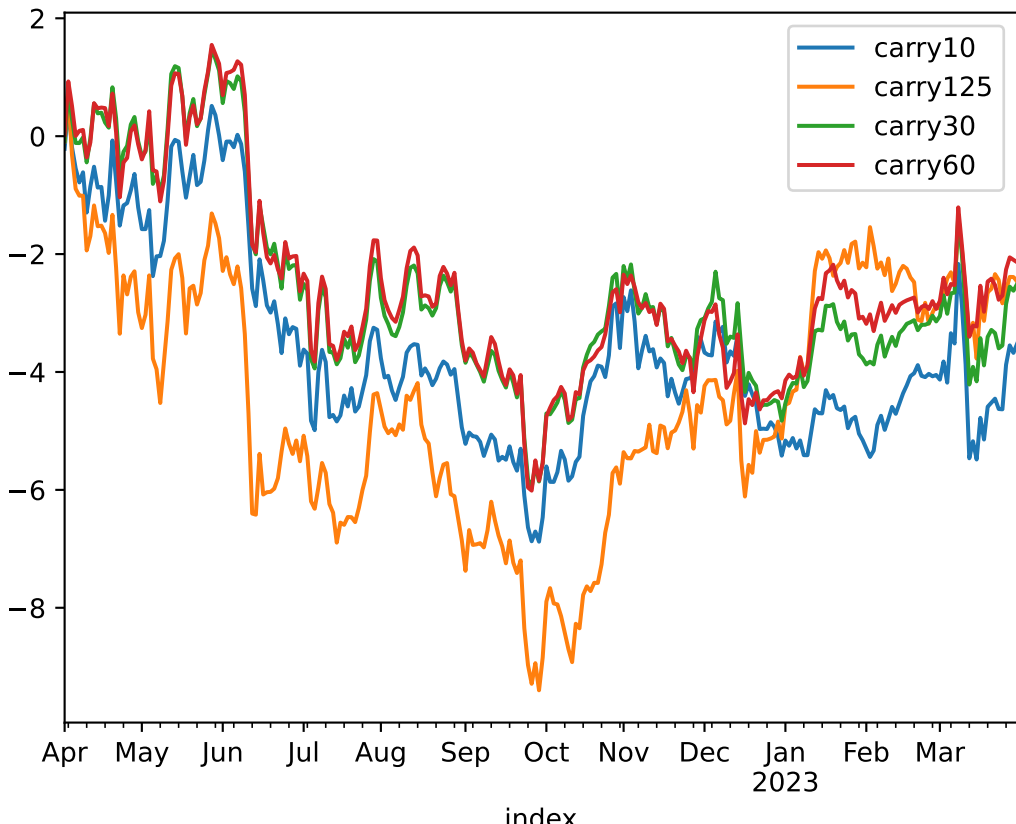
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.642, 'relmomentum20': 1.157, 'relmomentum40': 3.646, 'relmomentum80': 2.35}
ann. std {'relmomentum10': 13.399, 'relmomentum20': 10.473, 'relmomentum40': 9.643, 'relmomentum80': 9.788}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 7.589, 'carry125': 10.661, 'carry30': 9.277, 'carry60': 9.233}
ann. std {'carry10': 6.445, 'carry125': 5.999, 'carry30': 5.895, 'carry60': 5.26}
ann. SR {'carry10': 1.18, 'carry125': 1.78, 'carry30': 1.57, 'carry60': 1.76}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.468, 'carry125': -2.426, 'carry30': -2.469, 'carry60': -2.106}
ann. std {'carry10': 6.389, 'carry125': 7.166, 'carry30': 6.279, 'carry60': 6.312}
ann. SR {'carry10': -0.54, 'carry125': -0.34, 'carry30': -0.39, 'carry60': -0.33}

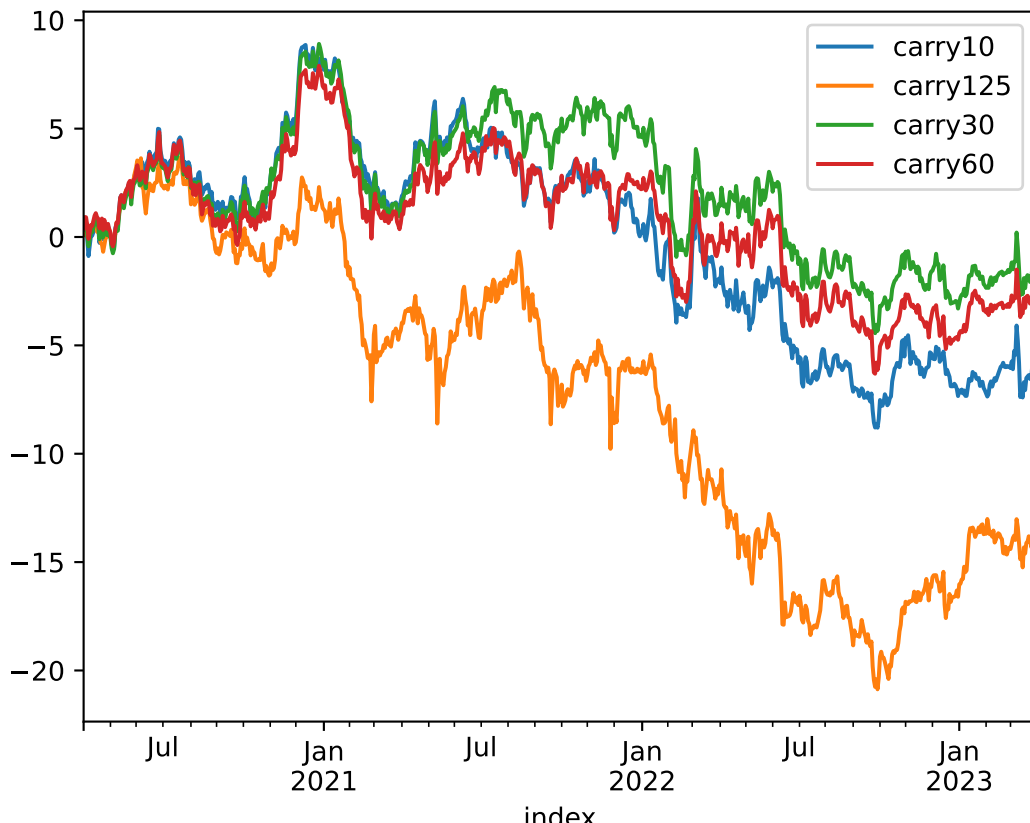


Total Trading Rule P&L for period '3Y'

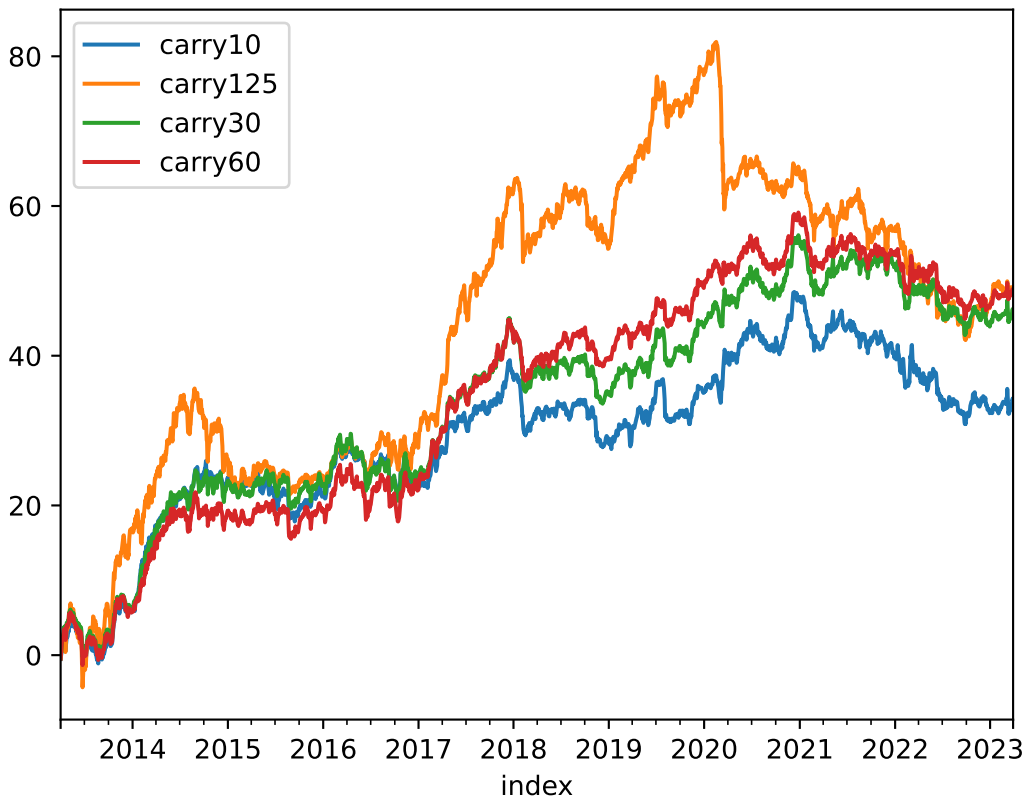
ann. mean {'carry10': -1.781, 'carry125': -4.561, 'carry30': -0.321, 'carry60': -0.797}

ann. std {'carry10': 6.607, 'carry125': 7.997, 'carry30': 6.519, 'carry60': 6.501}

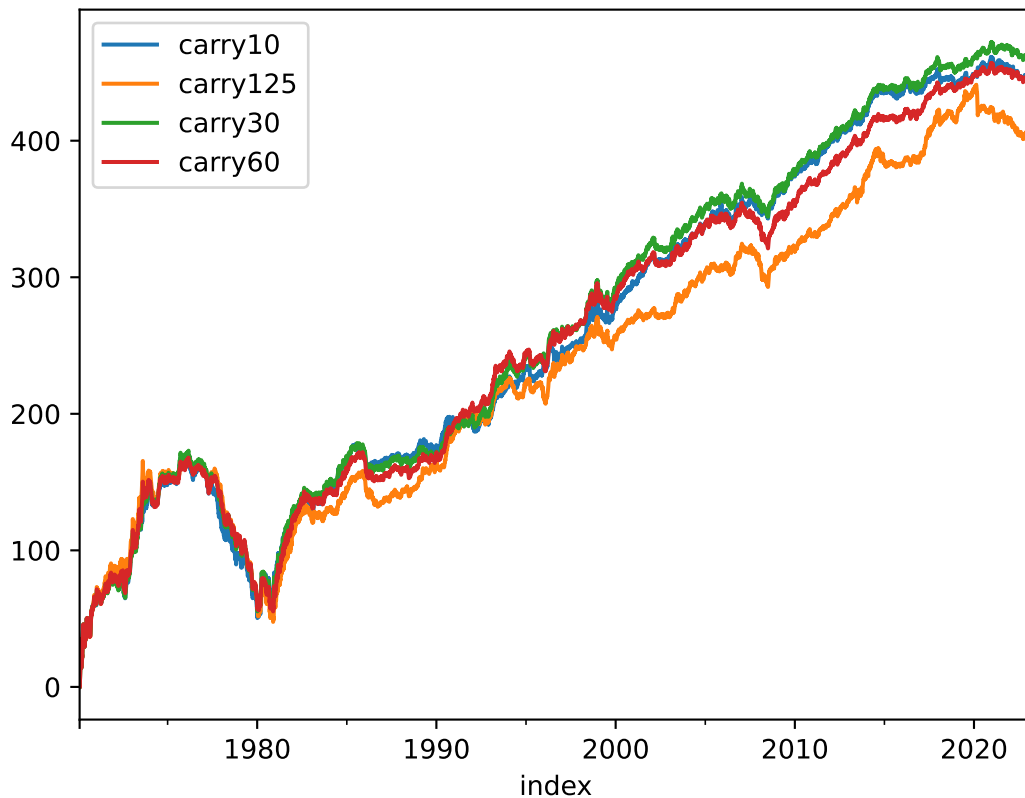
ann. SR {'carry10': -0.27, 'carry125': -0.57, 'carry30': -0.05, 'carry60': -0.12}



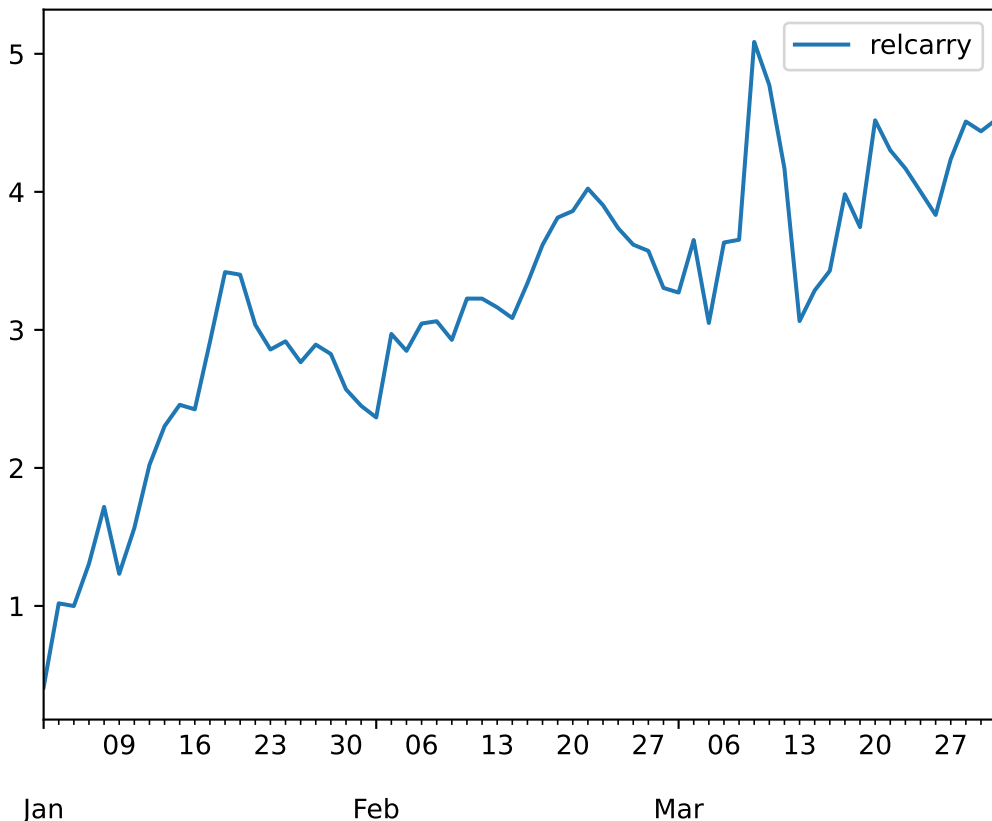
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.358, 'carry125': 4.811, 'carry30': 4.534, 'carry60': 4.788}
ann. std {'carry10': 6.393, 'carry125': 9.0, 'carry30': 6.491, 'carry60': 6.441}
ann. SR {'carry10': 0.53, 'carry125': 0.53, 'carry30': 0.7, 'carry60': 0.74}



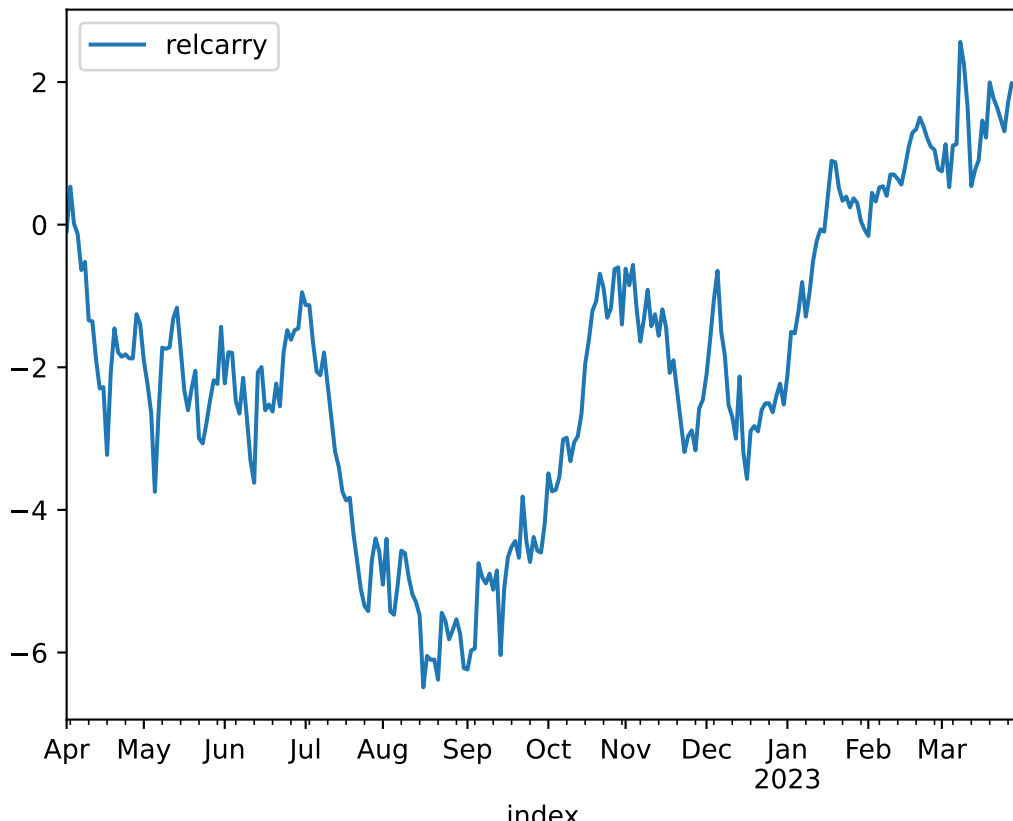
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.254, 'carry125': 7.533, 'carry30': 8.537, 'carry60': 8.246}
ann. std {'carry10': 11.205, 'carry125': 11.563, 'carry30': 11.262, 'carry60': 11.266}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



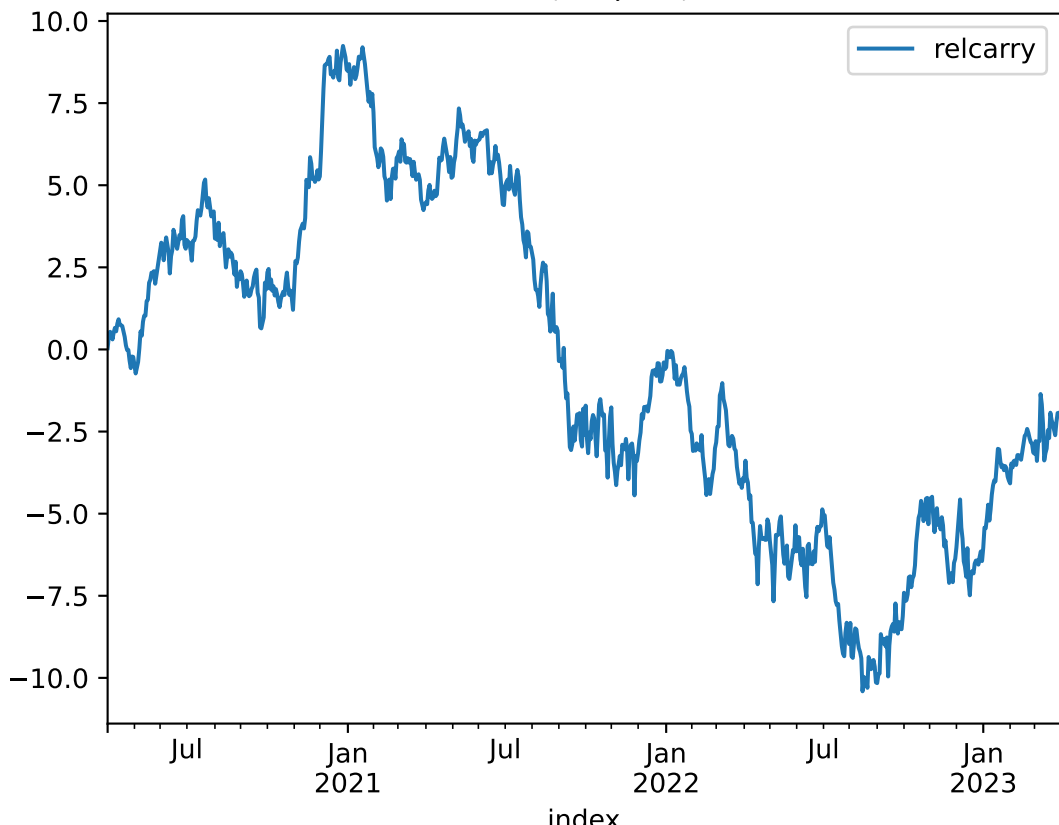
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 18.091}
ann. std {'relcarry': 5.982}
ann. SR {'relcarry': 3.02}



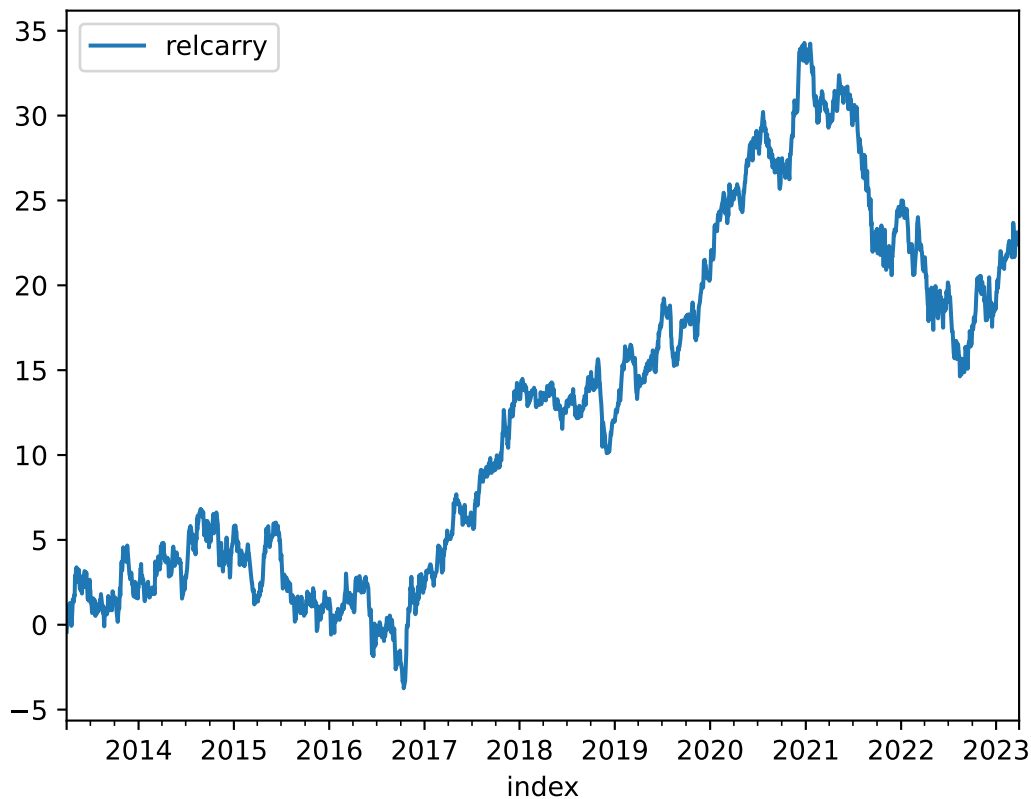
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 1.969}
ann. std {'relcarry': 7.216}
ann. SR {'relcarry': 0.27}



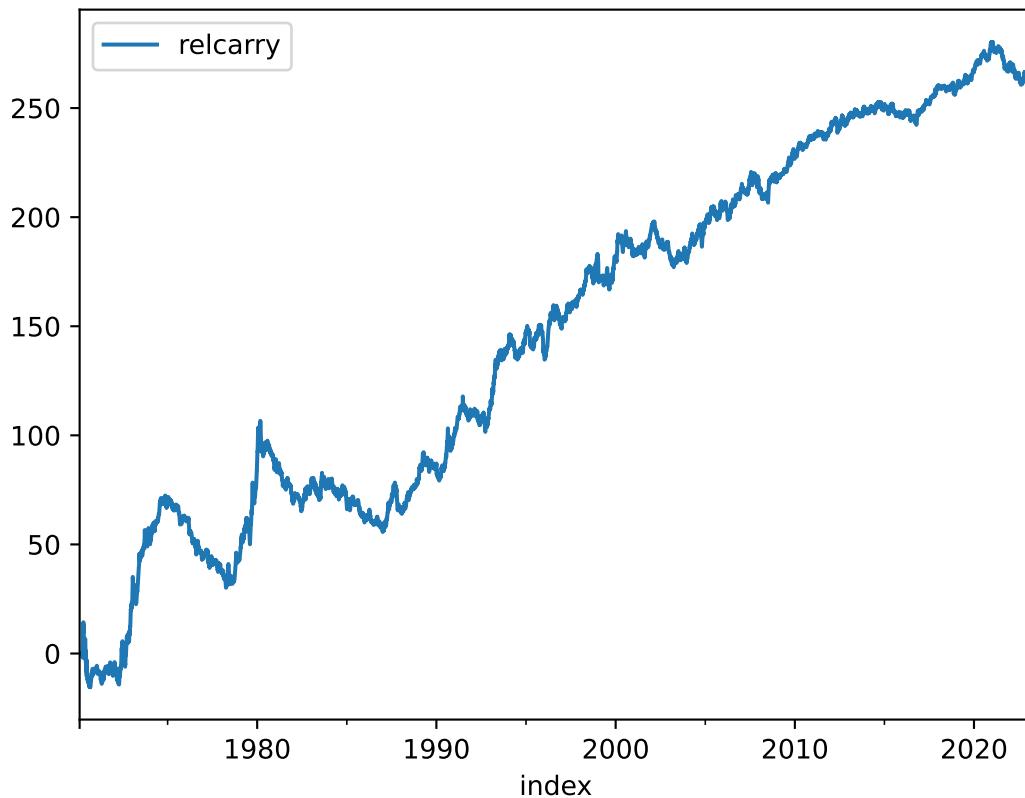
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.629}
ann. std {'relcarry': 6.639}
ann. SR {'relcarry': -0.09}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.269}
ann. std {'relcarry': 5.839}
ann. SR {'relcarry': 0.39}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.969}
ann. std {'relcarry': 8.962}
ann. SR {'relcarry': 0.55}

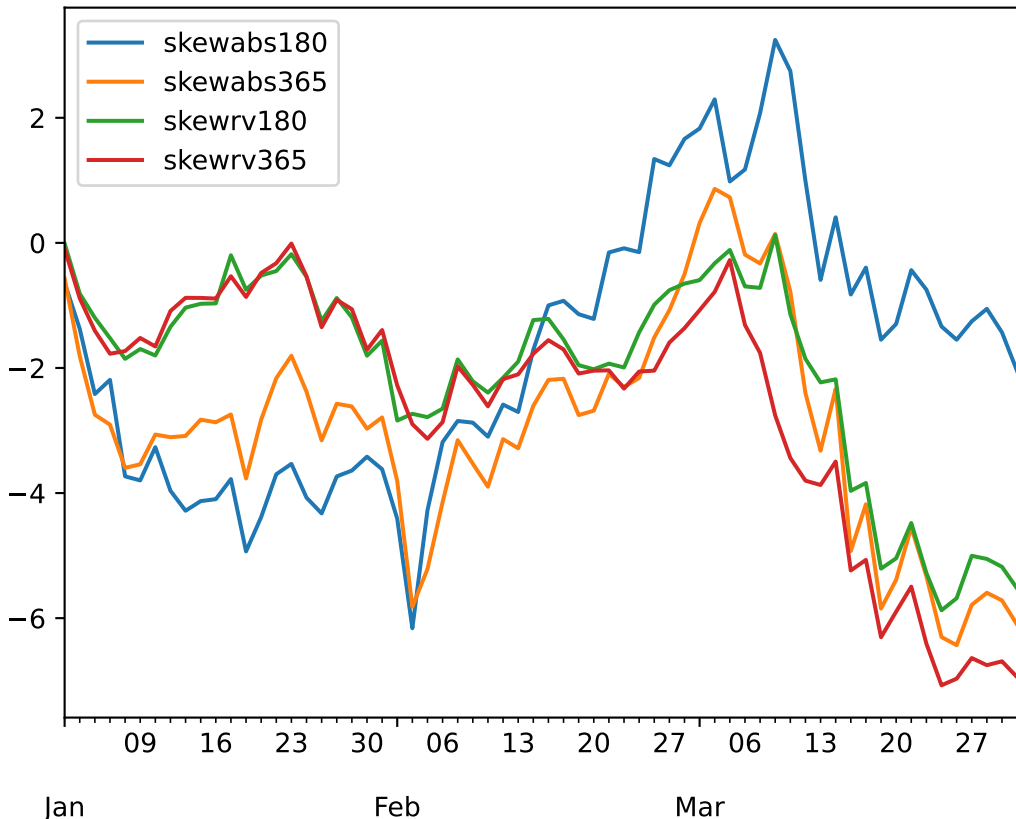


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': -8.197, 'skewabs365': -24.416, 'skewrv180': -22.103, 'skewrv365': -27.772}

ann. std {'skewabs180': 12.481, 'skewabs365': 12.468, 'skewrv180': 8.442, 'skewrv365': 8.053}

ann. SR {'skewabs180': -0.66, 'skewabs365': -1.96, 'skewrv180': -2.62, 'skewrv365': -3.45}

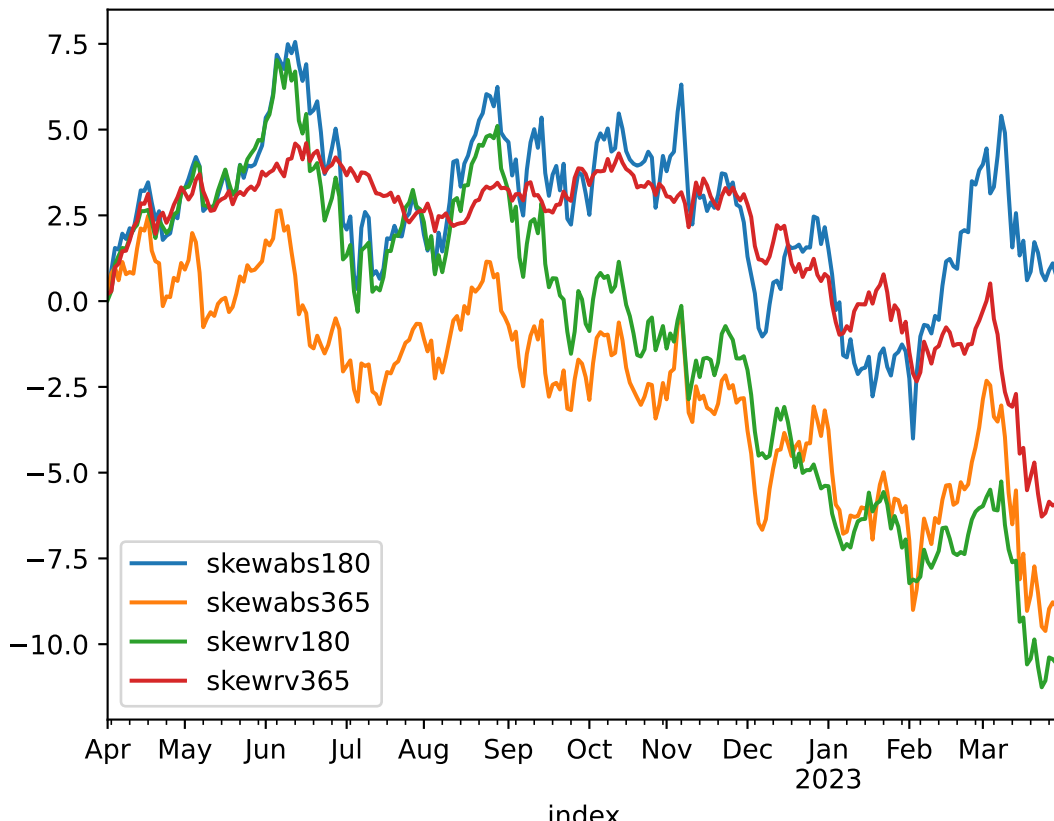


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': 0.105, 'skewabs365': -9.144, 'skewrv180': -10.74, 'skewrv365': -6.057}

ann. std {'skewabs180': 11.054, 'skewabs365': 9.905, 'skewrv180': 9.206, 'skewrv365': 5.59}

ann. SR {'skewabs180': 0.01, 'skewabs365': -0.92, 'skewrv180': -1.17, 'skewrv365': -1.08}

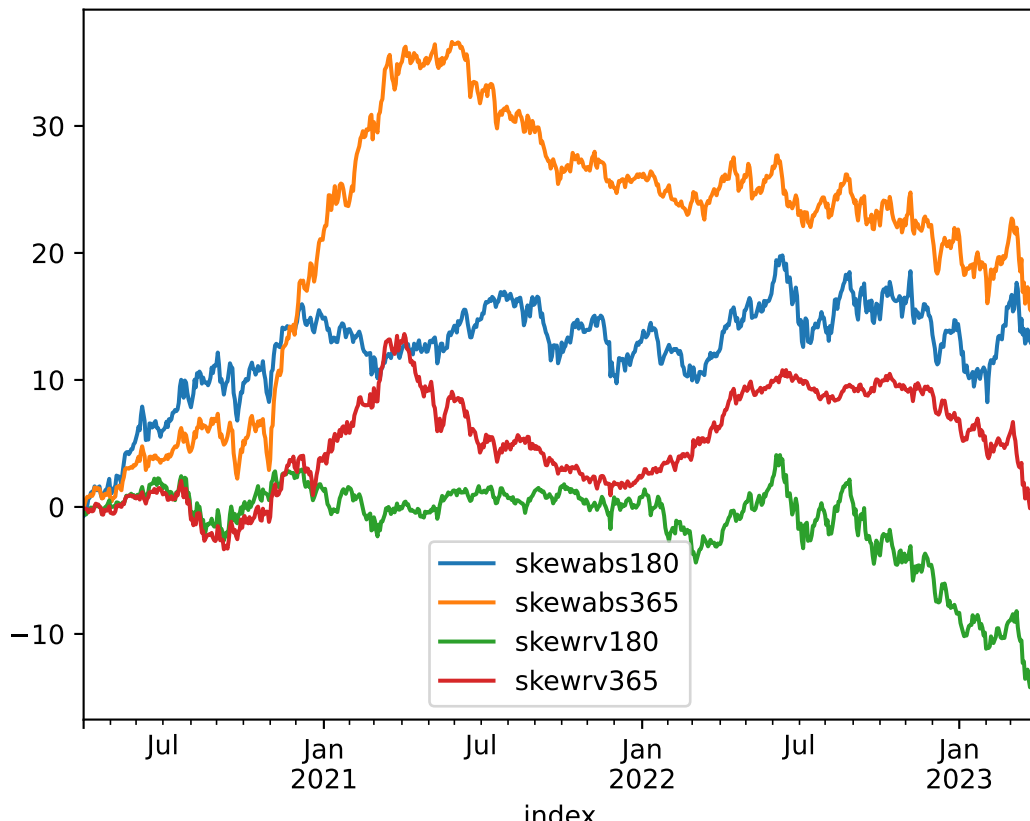


Total Trading Rule P&L for period '3Y'

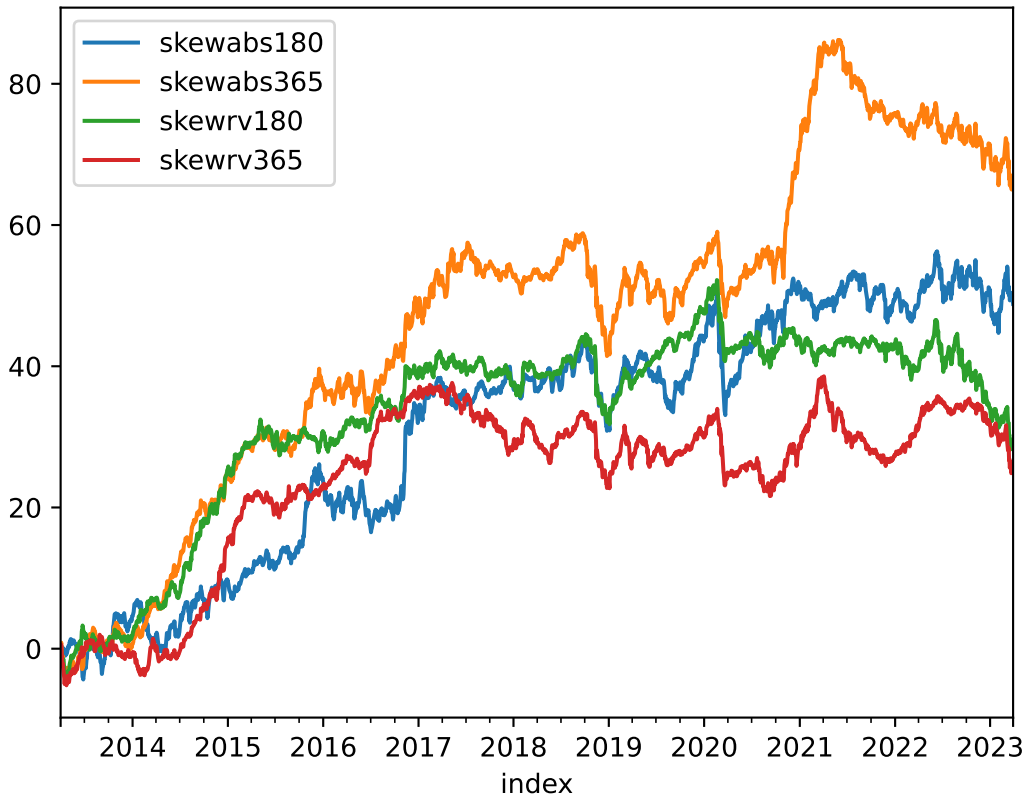
ann. mean {'skewabs180': 4.046, 'skewabs365': 5.156, 'skewrv180': -4.535, 'skewrv365': 0.008}

ann. std {'skewabs180': 9.111, 'skewabs365': 8.828, 'skewrv180': 7.171, 'skewrv365': 6.243}

ann. SR {'skewabs180': 0.44, 'skewabs365': 0.58, 'skewrv180': -0.63, 'skewrv365': 0.0}



Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.791, 'skewabs365': 6.412, 'skewrv180': 2.806, 'skewrv365': 2.451}
ann. std {'skewabs180': 7.996, 'skewabs365': 7.966, 'skewrv180': 6.396, 'skewrv365': 6.081}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.8, 'skewrv180': 0.44, 'skewrv365': 0.4}

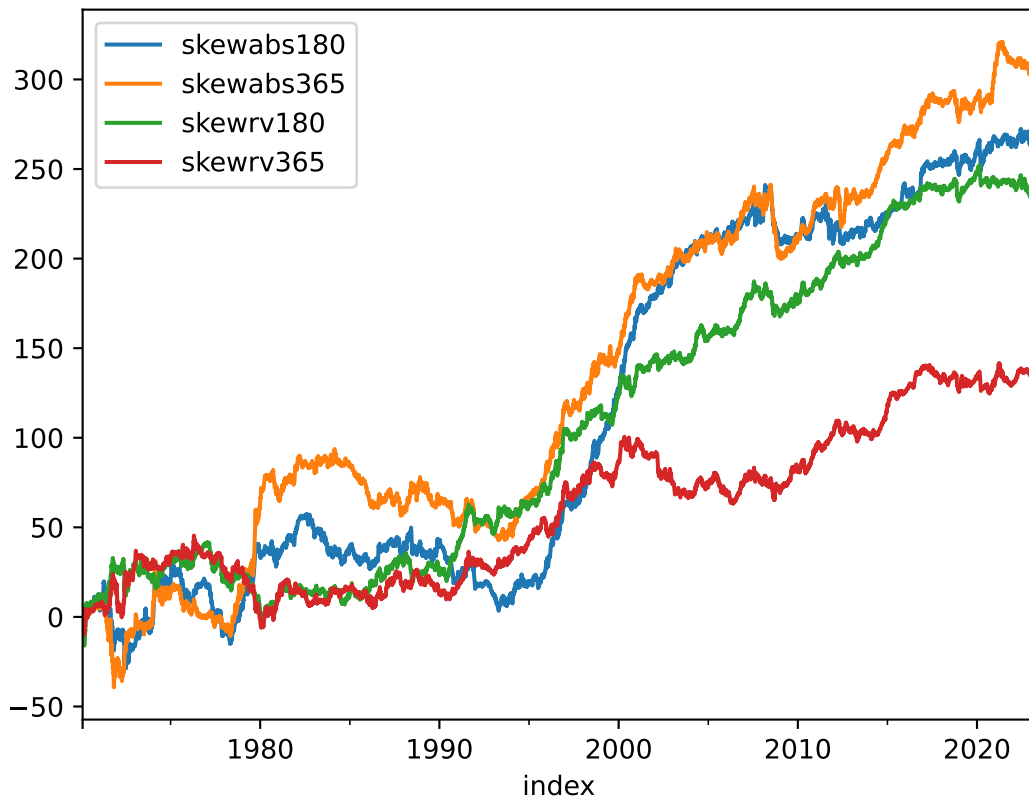


Total Trading Rule P&L for period '99Y'

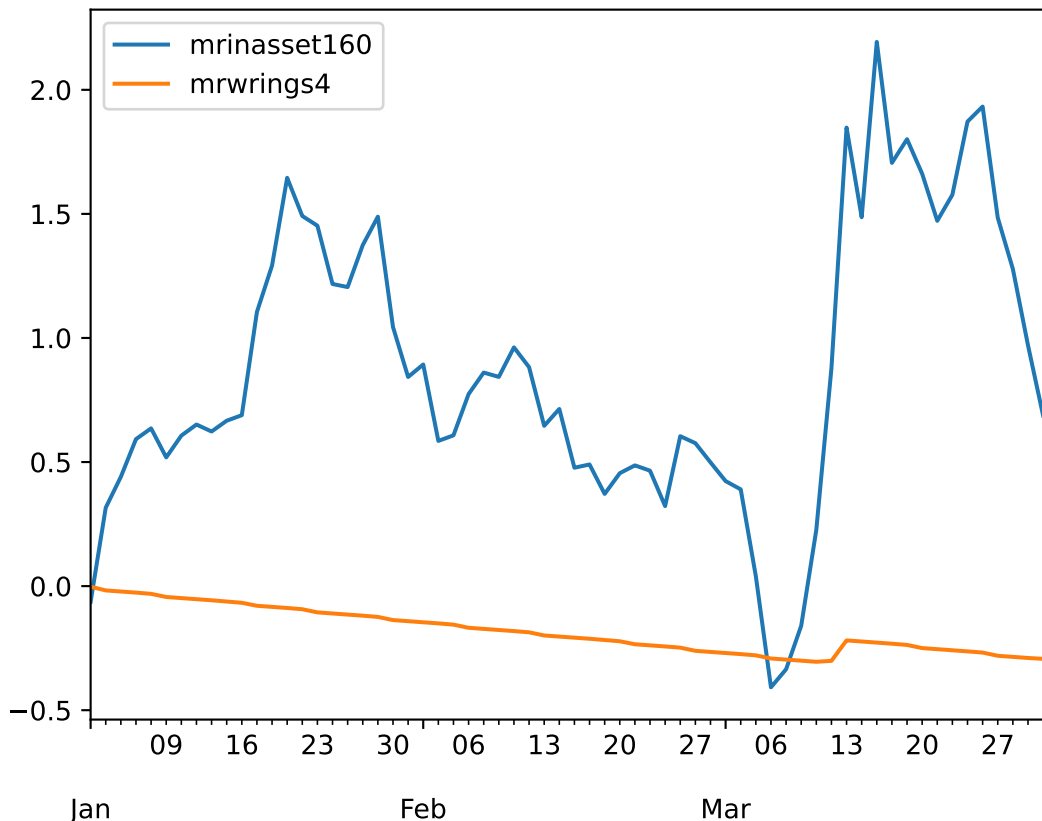
ann. mean {'skewabs180': 4.888, 'skewabs365': 5.539, 'skewrv180': 4.22, 'skewrv365': 2.363}

ann. std {'skewabs180': 10.103, 'skewabs365': 9.868, 'skewrv180': 8.752, 'skewrv365': 8.123}

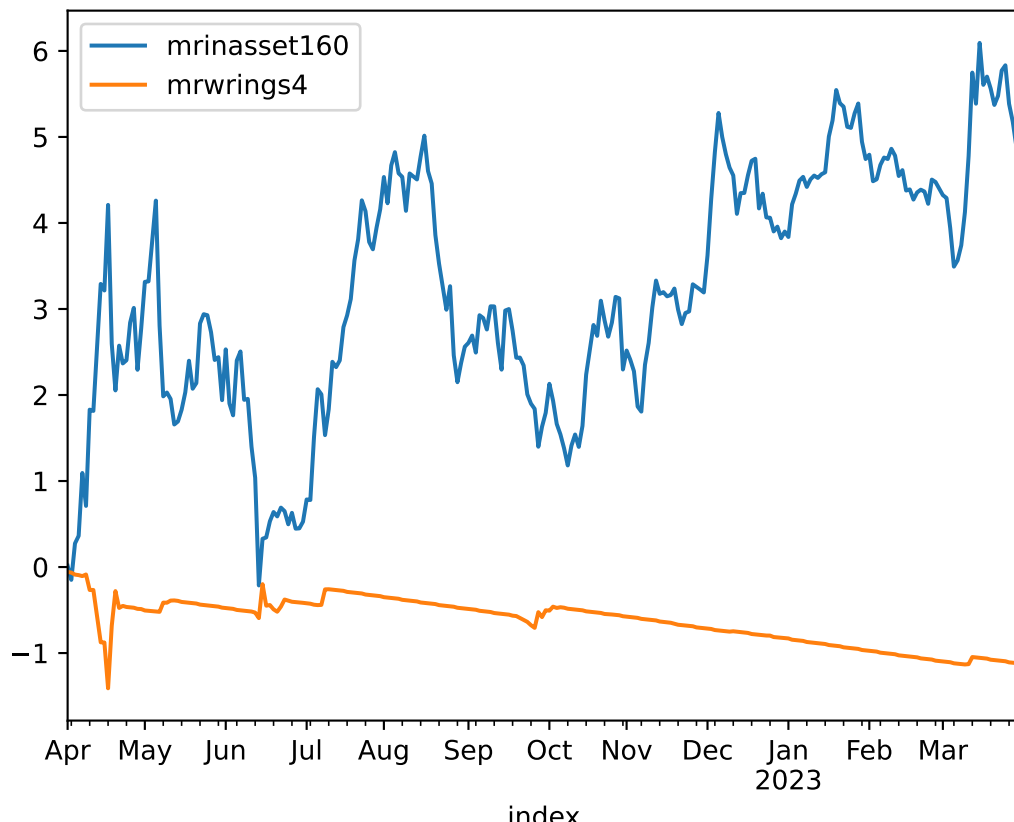
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



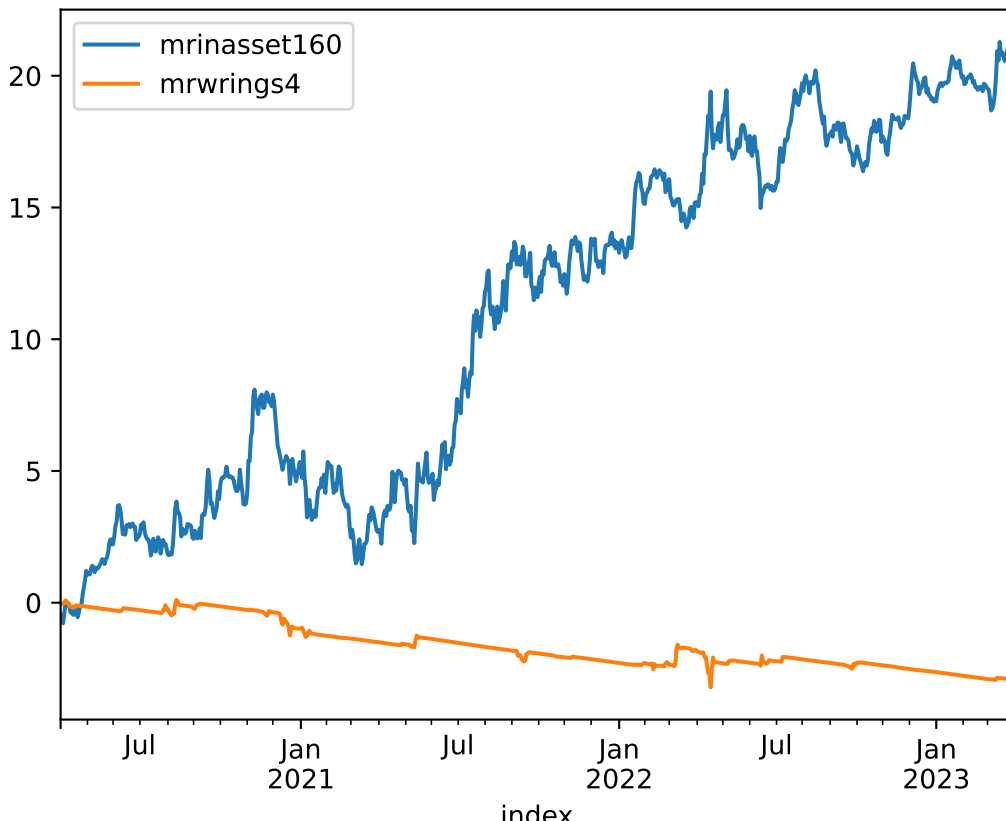
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 2.75, 'mrwrings4': -1.172}
ann. std {'mrinasset160': 4.338, 'mrwrings4': 0.185}
ann. SR {'mrinasset160': 0.63, 'mrwrings4': -6.32}



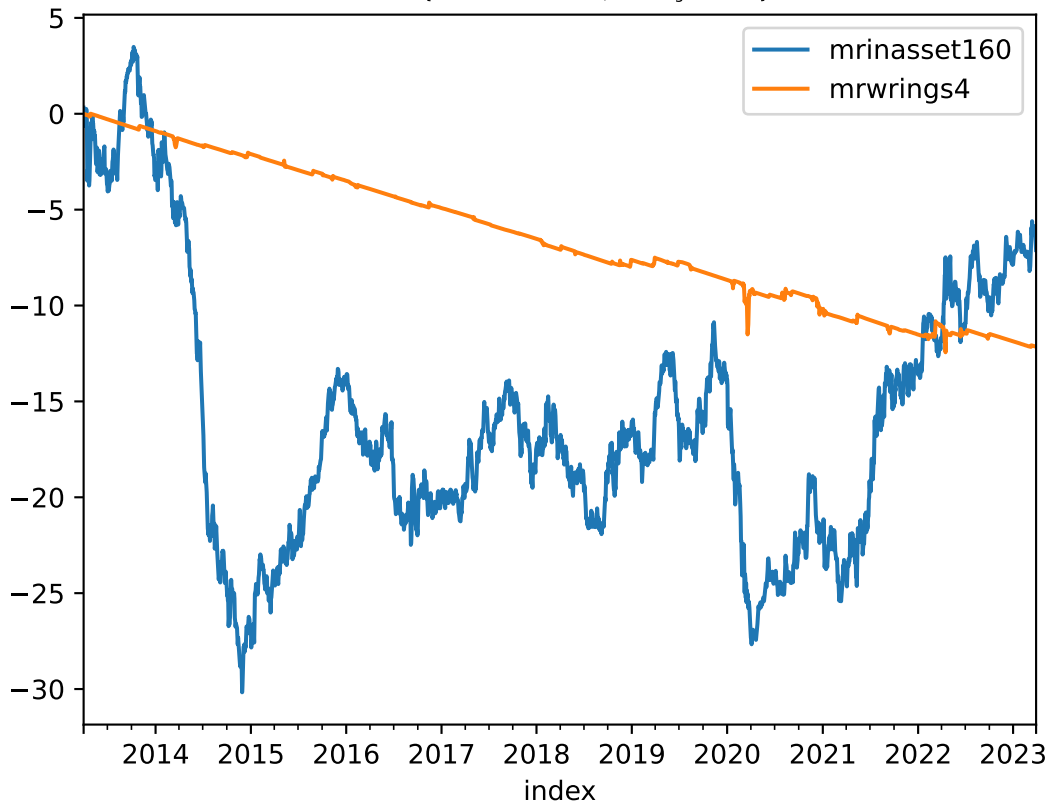
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 4.517, 'mrwrings4': -1.103}
ann. std {'mrinasset160': 5.781, 'mrwrings4': 1.249}
ann. SR {'mrinasset160': 0.78, 'mrwrings4': -0.88}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.475, 'mrwrings4': -0.956}
ann. std {'mrinasset160': 6.26, 'mrwrings4': 1.024}
ann. SR {'mrinasset160': 1.03, 'mrwrings4': -0.93}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.697, 'mrwrings4': -1.192}
ann. std {'mrinasset160': 6.31, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.11, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.552, 'mrwrings4': -2.113}
ann. std {'mrinasset160': 9.873, 'mrwrings4': 2.089}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.01}

