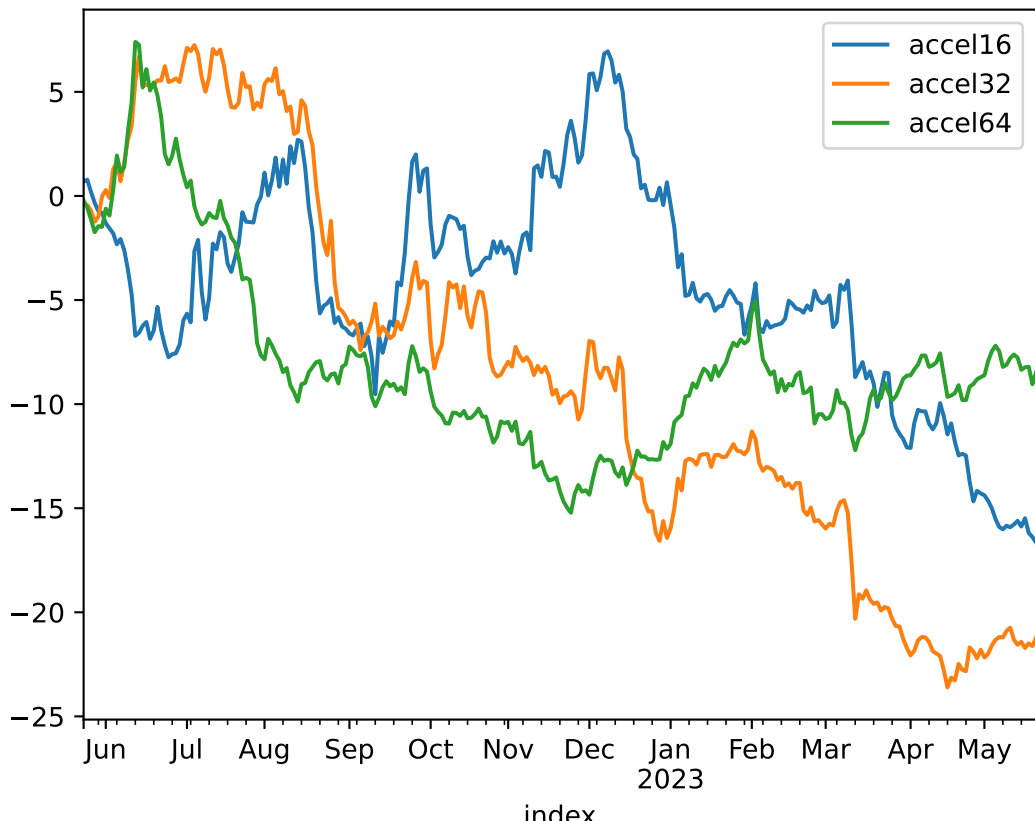


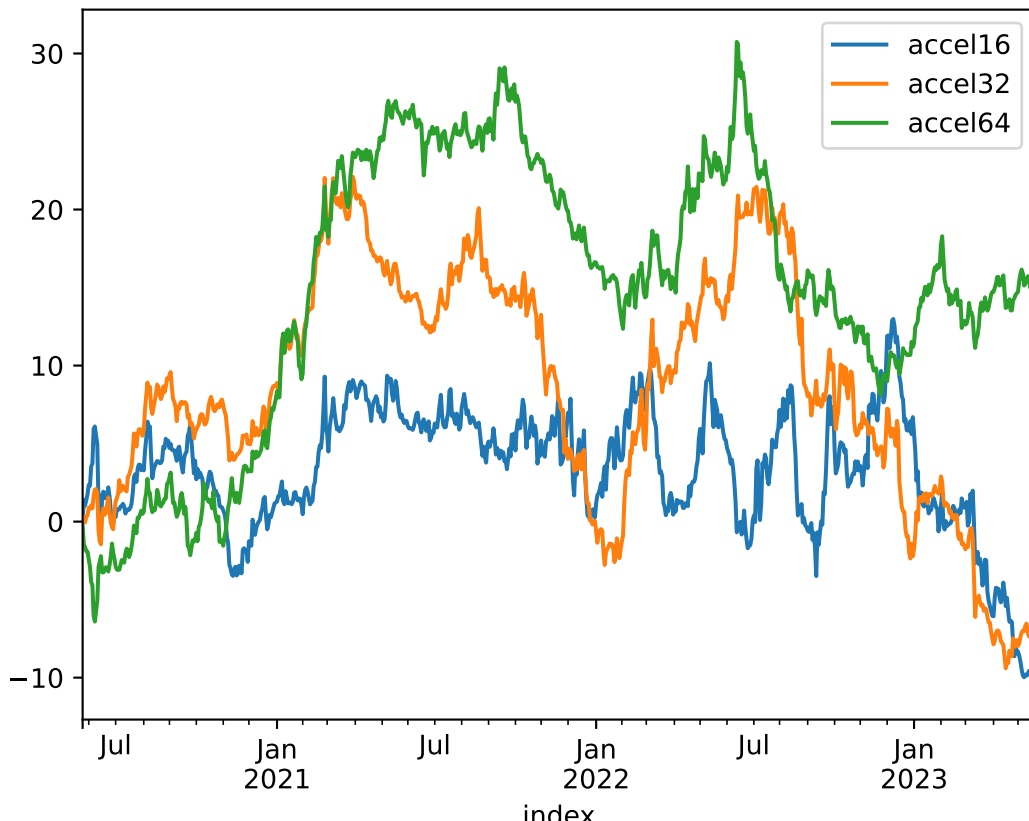
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -44.328, 'accel32': -12.259, 'accel64': 9.42}
ann. std {'accel16': 12.099, 'accel32': 9.507, 'accel64': 9.063}
ann. SR {'accel16': -3.66, 'accel32': -1.29, 'accel64': 1.04}



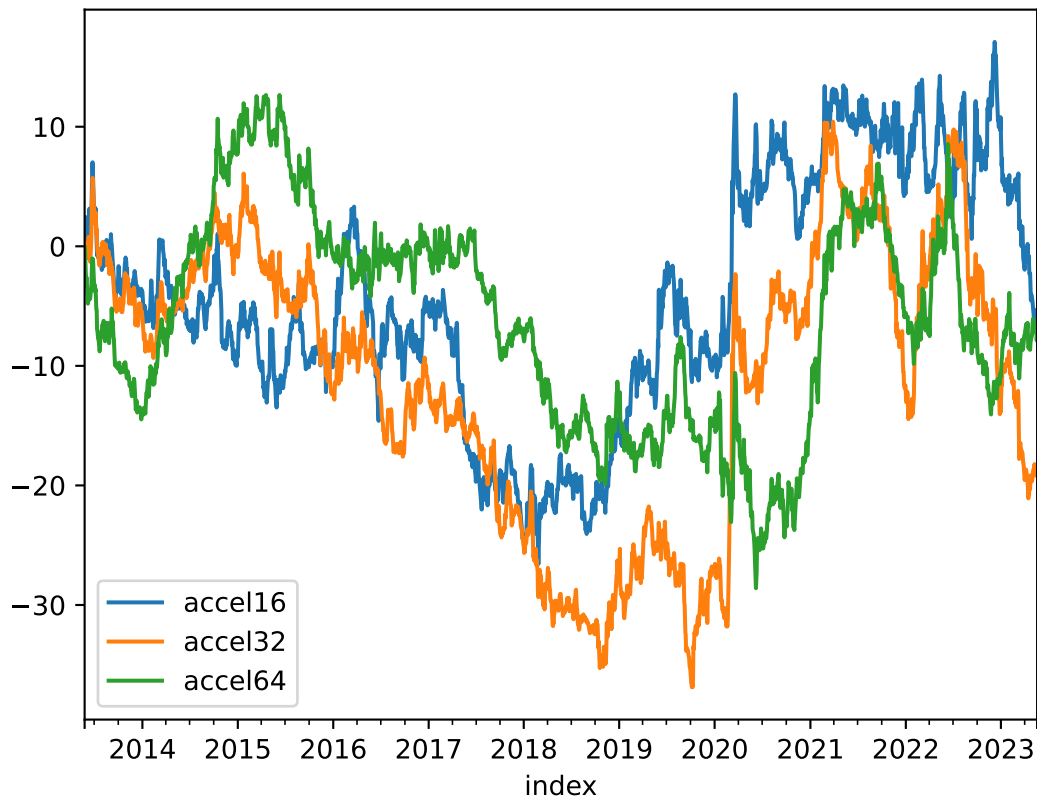
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -16.466, 'accel32': -20.971, 'accel64': -8.37}
ann. std {'accel16': 15.47, 'accel32': 12.801, 'accel64': 10.231}
ann. SR {'accel16': -1.06, 'accel32': -1.64, 'accel64': -0.82}



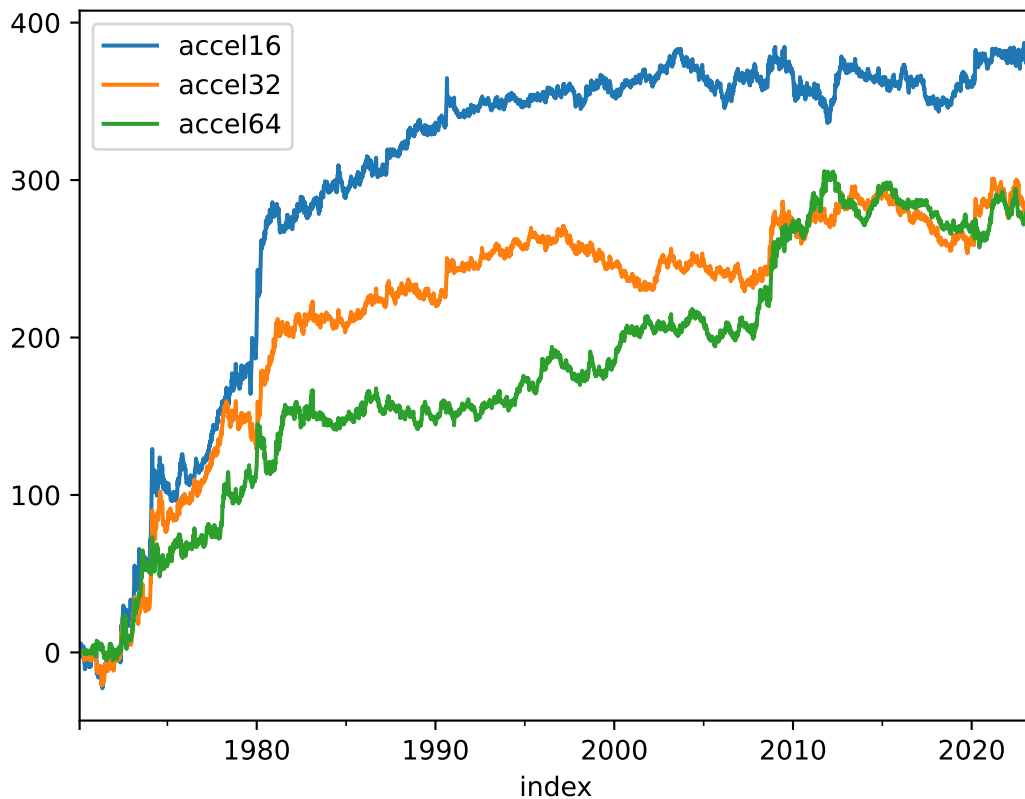
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.485, 'accel32': -2.302, 'accel64': 4.882}
ann. std {'accel16': 13.514, 'accel32': 11.75, 'accel64': 10.436}
ann. SR {'accel16': -0.26, 'accel32': -0.2, 'accel64': 0.47}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.64, 'accel32': -1.836, 'accel64': -0.718}
ann. std {'accel16': 11.69, 'accel32': 10.662, 'accel64': 9.318}
ann. SR {'accel16': -0.05, 'accel32': -0.17, 'accel64': -0.08}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.693, 'accel32': 5.003, 'accel64': 5.127}
ann. std {'accel16': 14.123, 'accel32': 12.448, 'accel64': 12.098}
ann. SR {'accel16': 0.47, 'accel32': 0.4, 'accel64': 0.42}

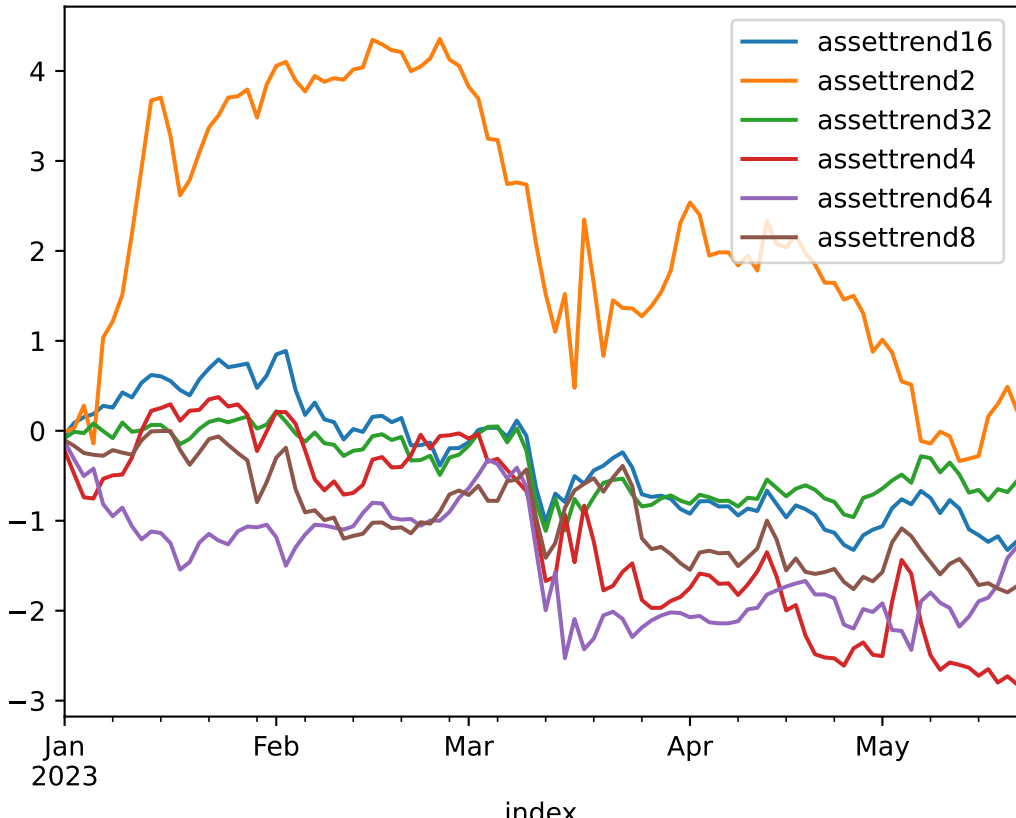


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.138, 'assetrend2': 0.577, 'assetrend32': -1.427, 'assetrend4': -7.215, 'assetrend64': -3.299, 'assetrend8': -4.421}

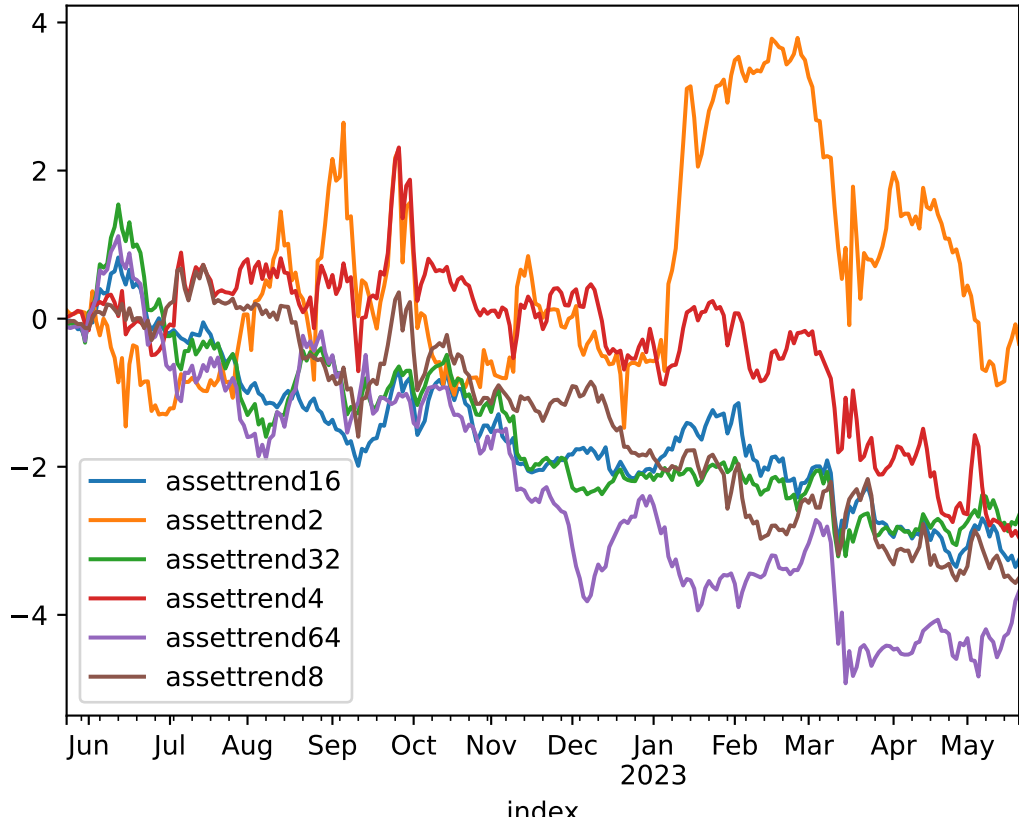
ann. std {'assetrend16': 2.459, 'assetrend2': 6.226, 'assetrend32': 2.26, 'assetrend4': 3.717, 'assetrend64': 3.352, 'assetrend8': 2.774}

ann. SR {'assetrend16': -1.28, 'assetrend2': 0.09, 'assetrend32': -0.63, 'assetrend4': -1.94, 'assetrend64': -0.98, 'assetrend8': -1.59}



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

ann. mean {'assettrend16': -3.216, 'assettrend2': -0.336, 'assettrend32': -2.624, 'assettrend4': -2.92, 'assettrend8': -3.461}
ann. std {'assettrend16': 2.231, 'assettrend2': 6.139, 'assettrend32': 2.461, 'assettrend4': 3.923, 'assettrend64': 3.132, 'assettrend8': 2.638}
ann. SR {'assettrend16': -1.44, 'assettrend2': -0.05, 'assettrend32': -1.07, 'assettrend4': -0.74, 'assettrend64': -1.16, 'assettrend8': -1.31}

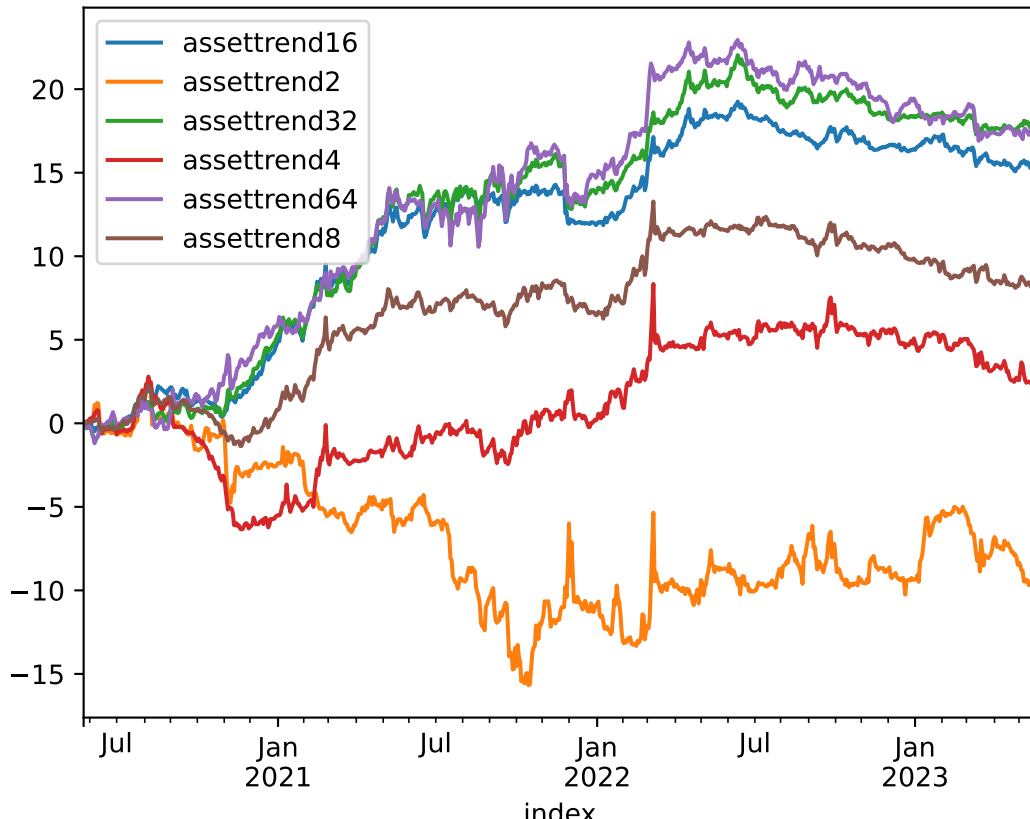


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.982, 'assettrend2': -2.994, 'assettrend32': 5.855, 'assettrend4': 0.744, 'assettrend64': 5.957, 'assettrend8': 2.671}

ann. std {'assettrend16': 3.419, 'assettrend2': 7.826, 'assettrend32': 4.131, 'assettrend4': 4.987, 'assettrend64': 5.019, 'assettrend8': 3.534}

ann. SR {'assettrend16': 1.46, 'assettrend2': -0.38, 'assettrend32': 1.42, 'assettrend4': 0.15, 'assettrend64': 1.19, 'assettrend8': 0.76}

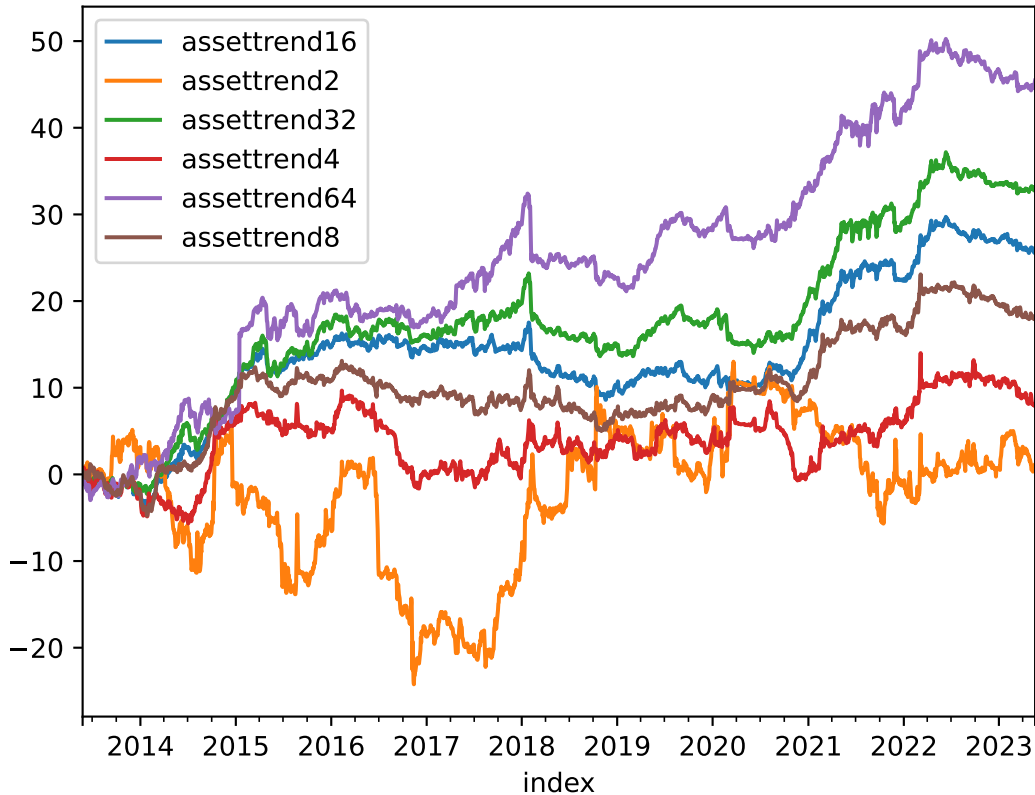


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.519, 'assettrend2': 0.086, 'assettrend32': 3.24, 'assettrend4': 0.778, 'assettrend64': 4.465, 'assettrend8': 1.763}

ann. std {'assettrend16': 3.149, 'assettrend2': 9.768, 'assettrend32': 3.586, 'assettrend4': 4.975, 'assettrend64': 5.193, 'assettrend8': 3.448}

ann. SR {'assettrend16': 0.8, 'assettrend2': 0.01, 'assettrend32': 0.9, 'assettrend4': 0.16, 'assettrend64': 0.86, 'assettrend8': 0.51}

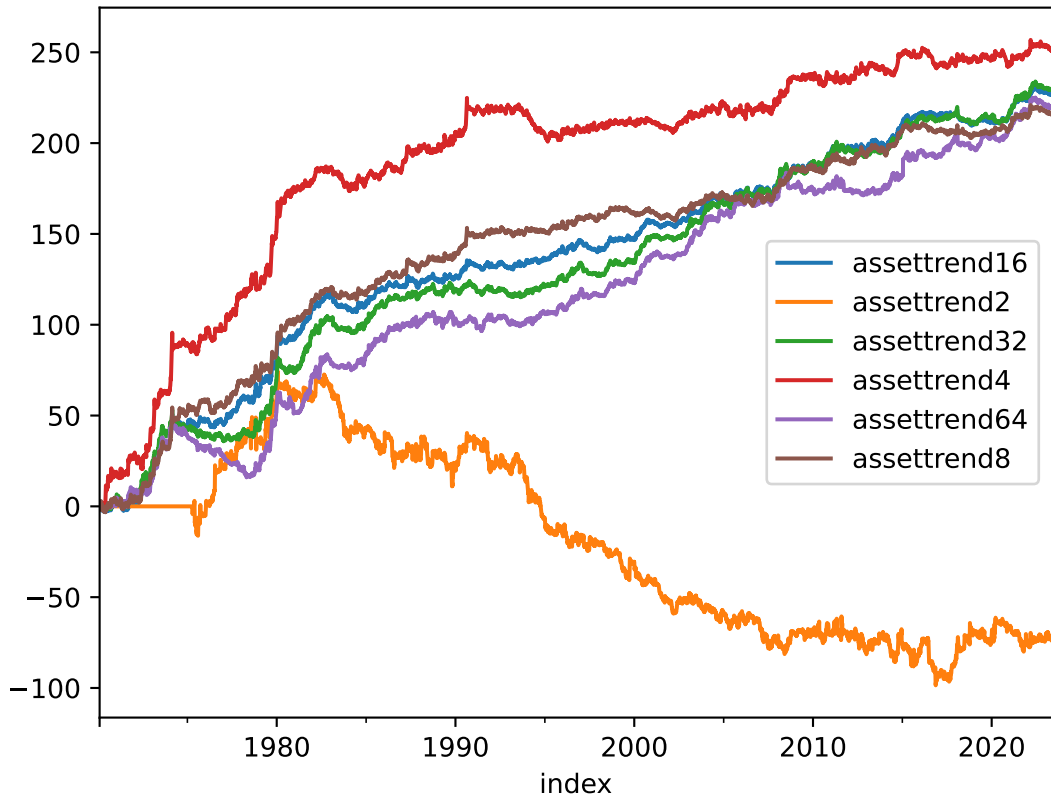


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.172, 'assettrend2': -1.352, 'assettrend32': 4.23, 'assettrend4': 4.617, 'assettrend64': 4.056, 'assettrend8': 3.973}

ann. std {'assettrend16': 4.301, 'assettrend2': 10.253, 'assettrend32': 4.492, 'assettrend4': 6.544, 'assettrend64': 4.993, 'assettrend8': 4.631}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

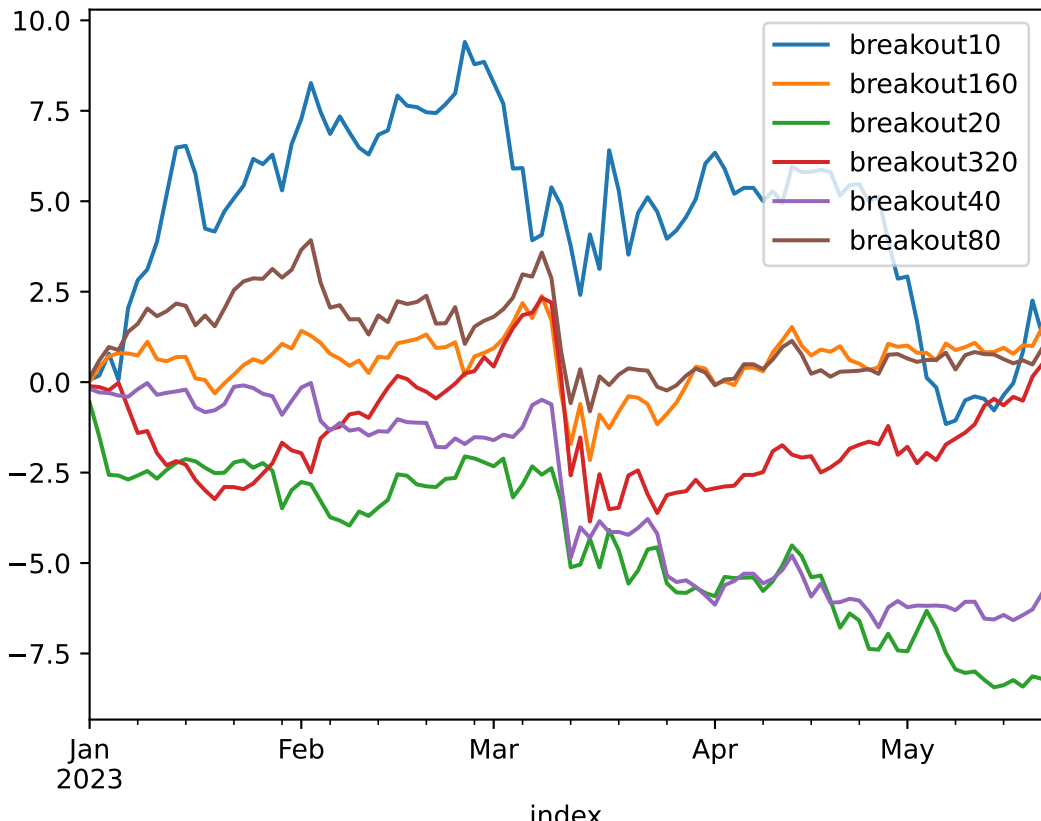


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 3.392, 'breakout160': 3.864, 'breakout20': -20.997, 'breakout320': 1.257, 'breakout40': 2.389, 'breakout80': 7.352}

ann. std {'breakout10': 13.794, 'breakout160': 7.36, 'breakout20': 7.458, 'breakout320': 9.095, 'breakout40': 6.899, 'breakout80': 7.352}

ann. SR {'breakout10': 0.25, 'breakout160': 0.52, 'breakout20': -2.82, 'breakout320': 0.14, 'breakout40': -2.17, 'breakout80': 0.33}

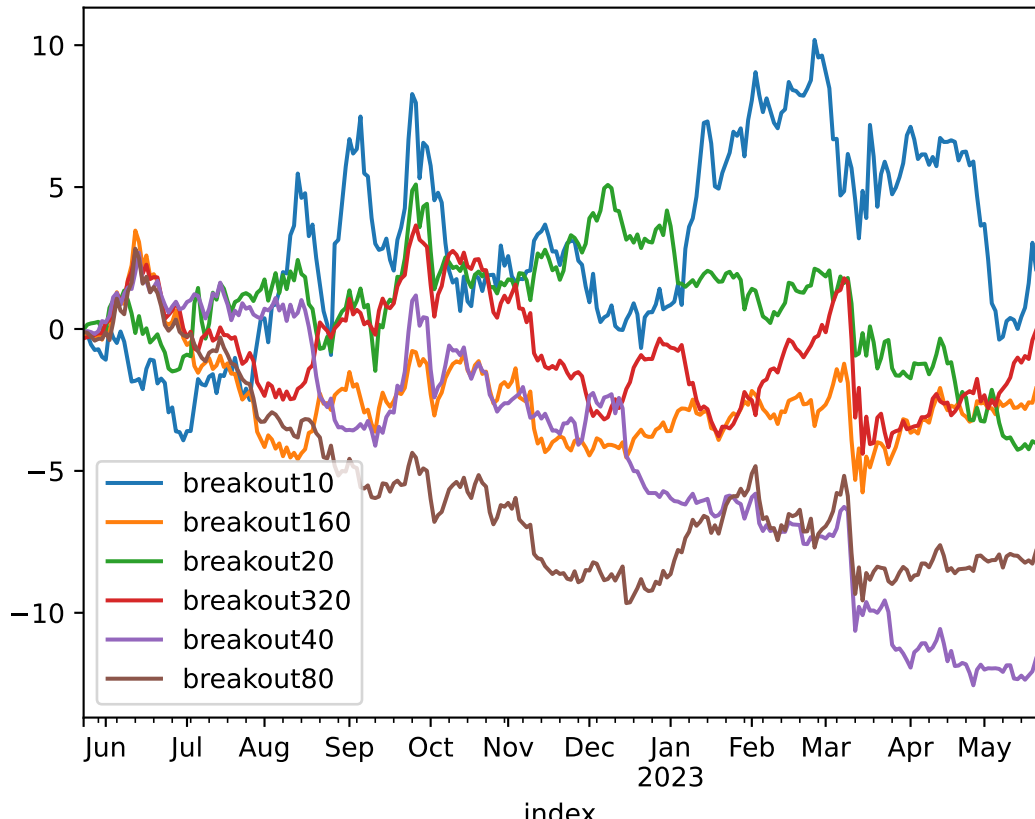


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.083, 'breakout160': -2.068, 'breakout20': -3.978, 'breakout320': -0.054, 'breakout40': -11.484, 'breakout80': -7.732}

ann. std {'breakout10': 13.273, 'breakout160': 6.893, 'breakout20': 8.364, 'breakout320': 7.574, 'breakout40': 7.094, 'breakout80': 6.486}

ann. SR {'breakout10': 0.16, 'breakout160': -0.3, 'breakout20': -0.48, 'breakout320': -0.01, 'breakout40': -1.62, 'breakout80': -1.19}

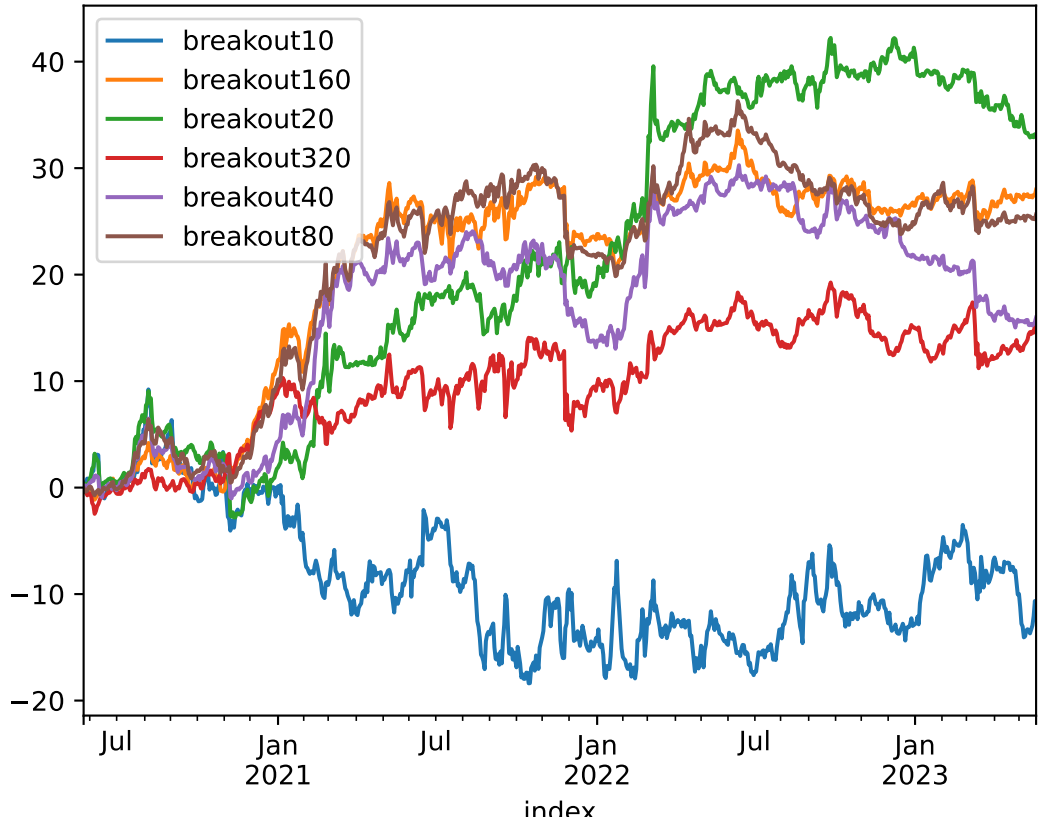


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.802, 'breakout160': 9.182, 'breakout20': 10.868, 'breakout320': 5.105, 'breakout40': 5.242, 'breakout80': 8.417}

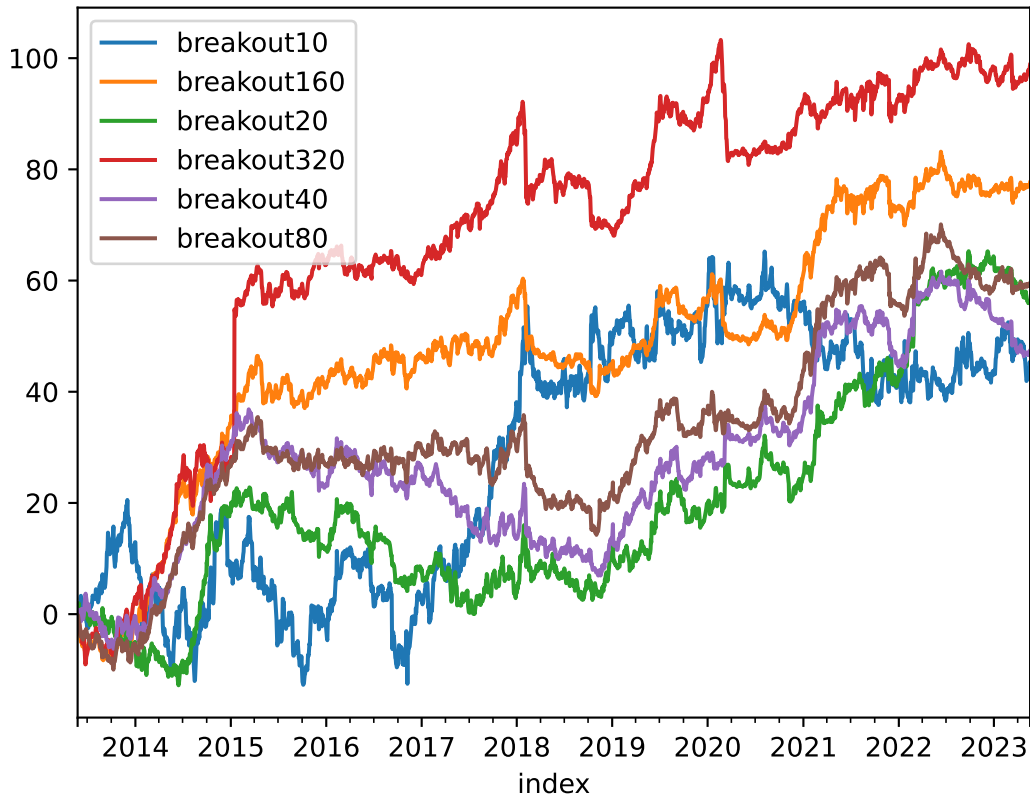
ann. std {'breakout10': 15.14, 'breakout160': 9.196, 'breakout20': 11.085, 'breakout320': 9.92, 'breakout40': 9.495, 'breakout80': 8.921}

ann. SR {'breakout10': -0.25, 'breakout160': 1.0, 'breakout20': 0.98, 'breakout320': 0.51, 'breakout40': 0.55, 'breakout80': 0.94}



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

ann. mean {'breakout10': 4.363, 'breakout160': 7.625, 'breakout20': 5.517, 'breakout320': 9.707, 'breakout40': 4.649, 'breakout80': 5.841}
ann. std {'breakout10': 17.787, 'breakout160': 8.855, 'breakout20': 11.057, 'breakout320': 13.086, 'breakout40': 9.355, 'breakout80': 8.708}
ann. SR {'breakout10': 0.25, 'breakout160': 0.86, 'breakout20': 0.5, 'breakout320': 0.74, 'breakout40': 0.5, 'breakout80': 0.67}

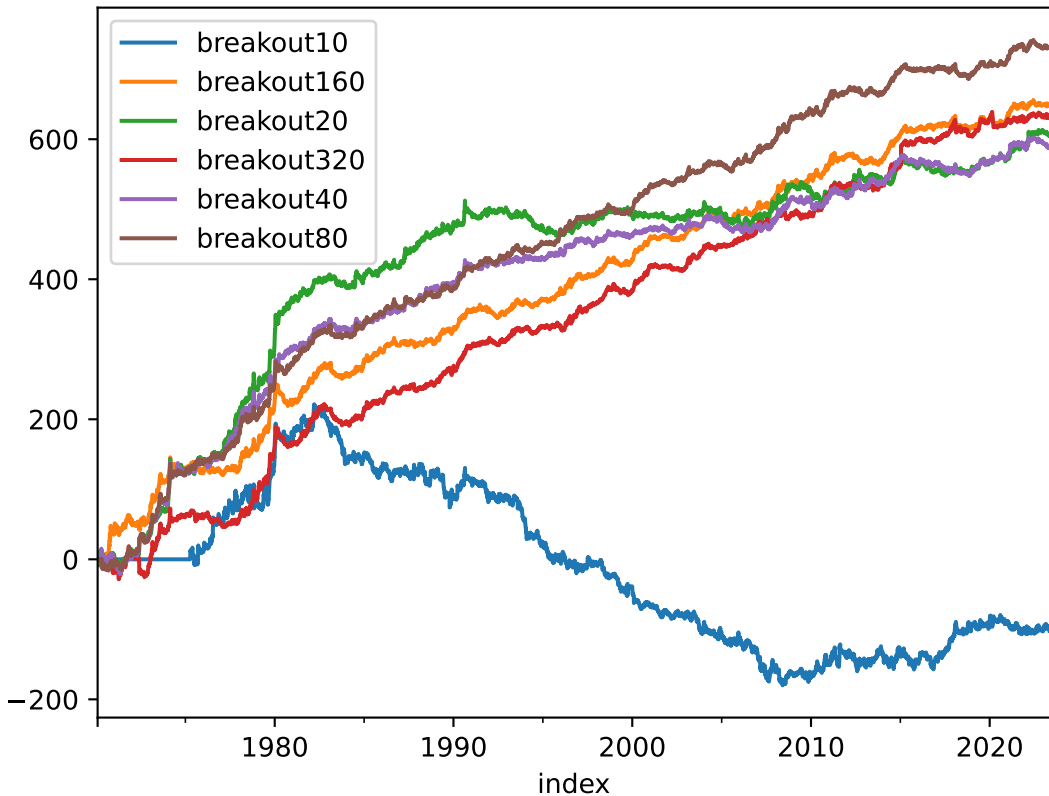


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.847, 'breakout160': 11.976, 'breakout20': 11.124, 'breakout320': 11.681, 'breakout40': 10.827, 'breakout80': 13.463}

ann. std {'breakout10': 21.31, 'breakout160': 11.522, 'breakout20': 14.882, 'breakout320': 12.108, 'breakout40': 12.105, 'breakout80': 11.71}

ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.89, 'breakout80': 1.15}

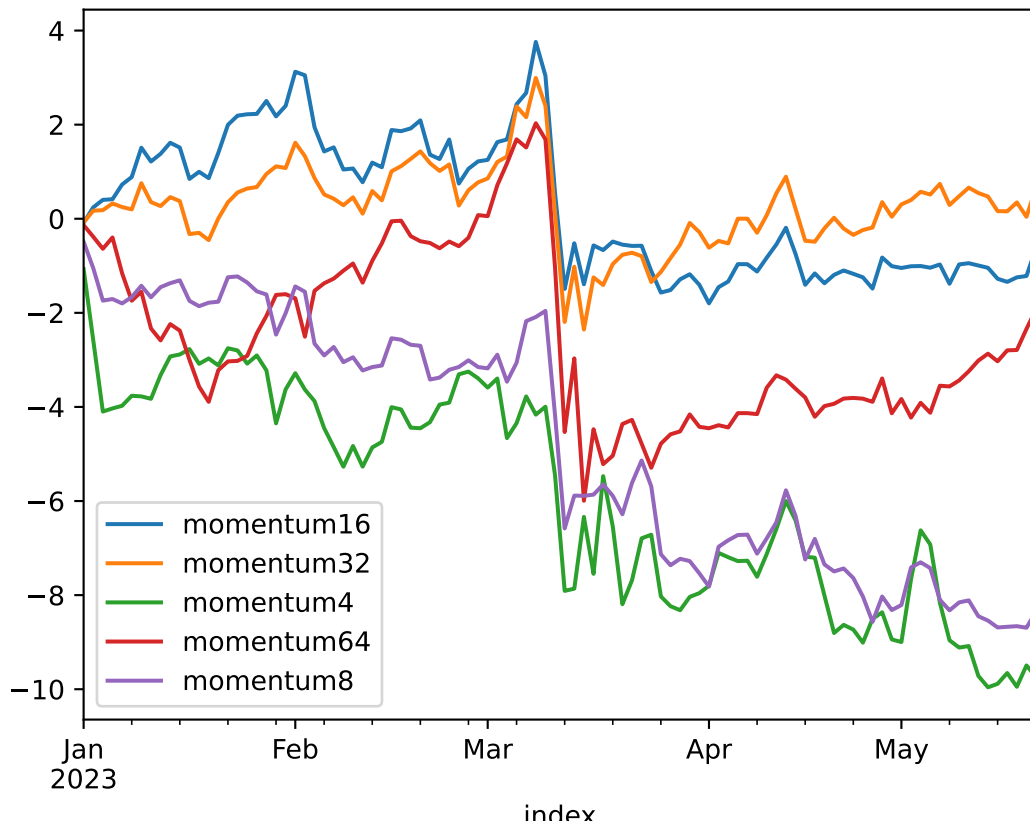


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -1.579, 'momentum32': 1.714, 'momentum4': -24.944, 'momentum64': -4.917, 'momentum8': -21.362}

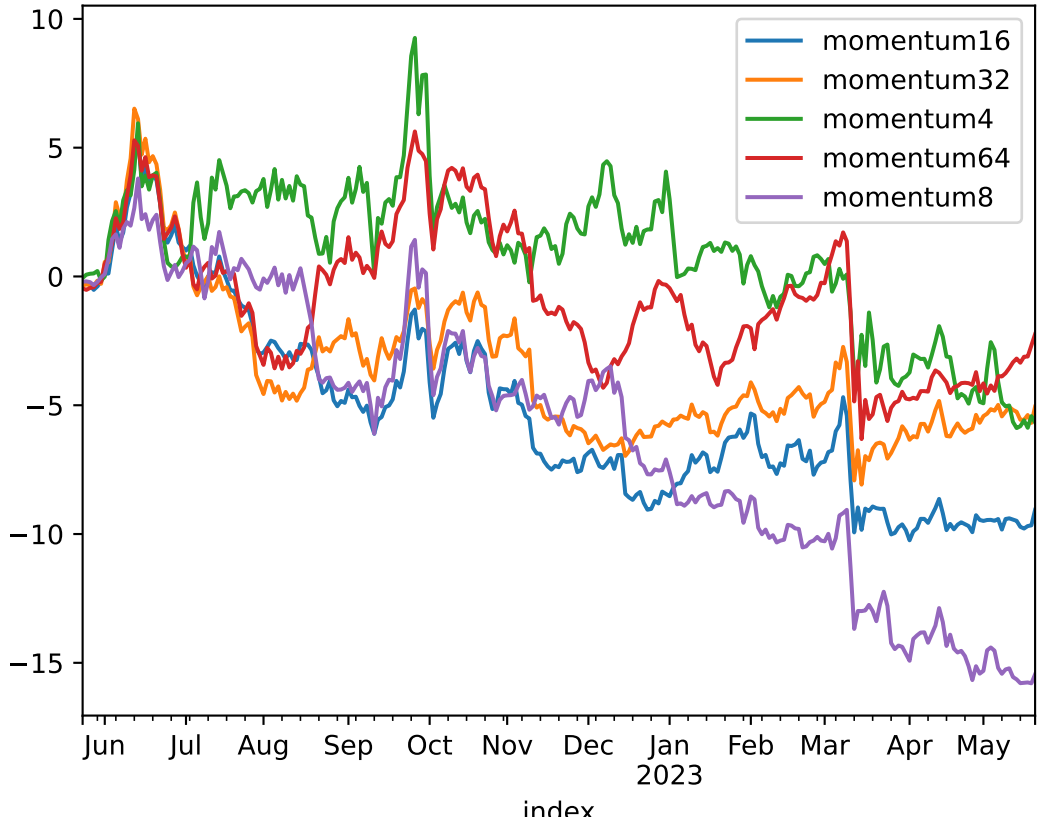
ann. std {'momentum16': 8.19, 'momentum32': 8.23, 'momentum4': 10.902, 'momentum64': 10.972, 'momentum8': 8.28}

ann. SR {'momentum16': -0.19, 'momentum32': 0.21, 'momentum4': -2.29, 'momentum64': -0.45, 'momentum8': -2.58}



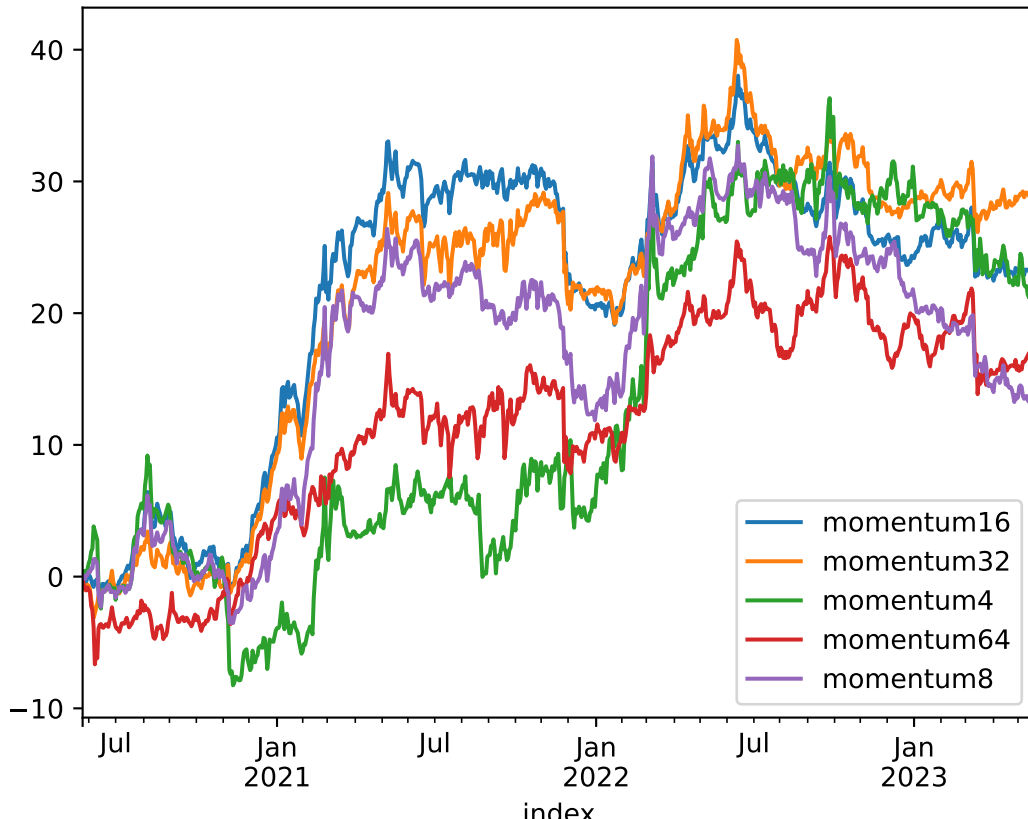
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -8.957, 'momentum32': -4.998, 'momentum4': -5.606, 'momentum64': -2.214, 'momentum8': -15.268}
ann. std {'momentum16': 8.48, 'momentum32': 8.778, 'momentum4': 13.167, 'momentum64': 10.146, 'momentum8': 9.688}
ann. SR {'momentum16': -1.06, 'momentum32': -0.57, 'momentum4': -0.43, 'momentum64': -0.22, 'momentum8': -1.58}



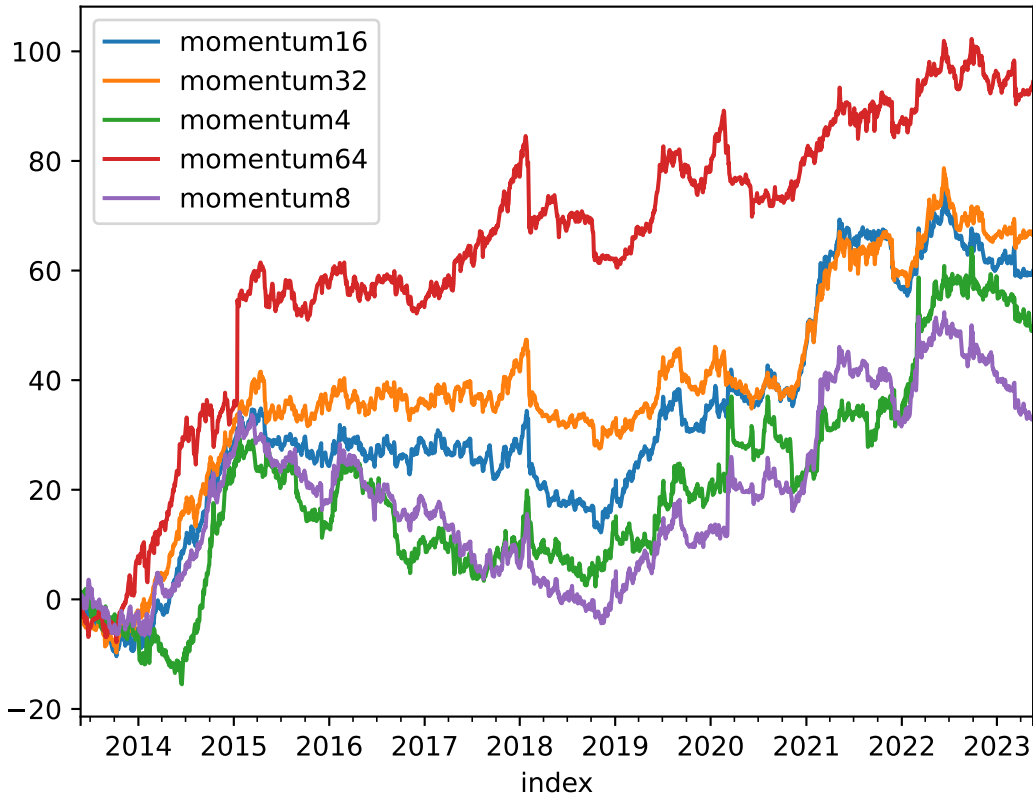
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.76, 'momentum32': 9.574, 'momentum4': 7.02, 'momentum64': 5.883, 'momentum8': 4.423}
ann. std {'momentum16': 10.133, 'momentum32': 10.383, 'momentum4': 14.709, 'momentum64': 10.822, 'momentum8': 11.449}
ann. SR {'momentum16': 0.77, 'momentum32': 0.92, 'momentum4': 0.48, 'momentum64': 0.54, 'momentum8': 0.39}



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

ann. mean {'momentum16': 5.886, 'momentum32': 6.593, 'momentum4': 4.835, 'momentum64': 9.273, 'momentum8': 3.257}
ann. std {'momentum16': 9.63, 'momentum32': 9.257, 'momentum4': 13.673, 'momentum64': 11.872, 'momentum8': 10.831}
ann. SR {'momentum16': 0.61, 'momentum32': 0.71, 'momentum4': 0.35, 'momentum64': 0.78, 'momentum8': 0.3}

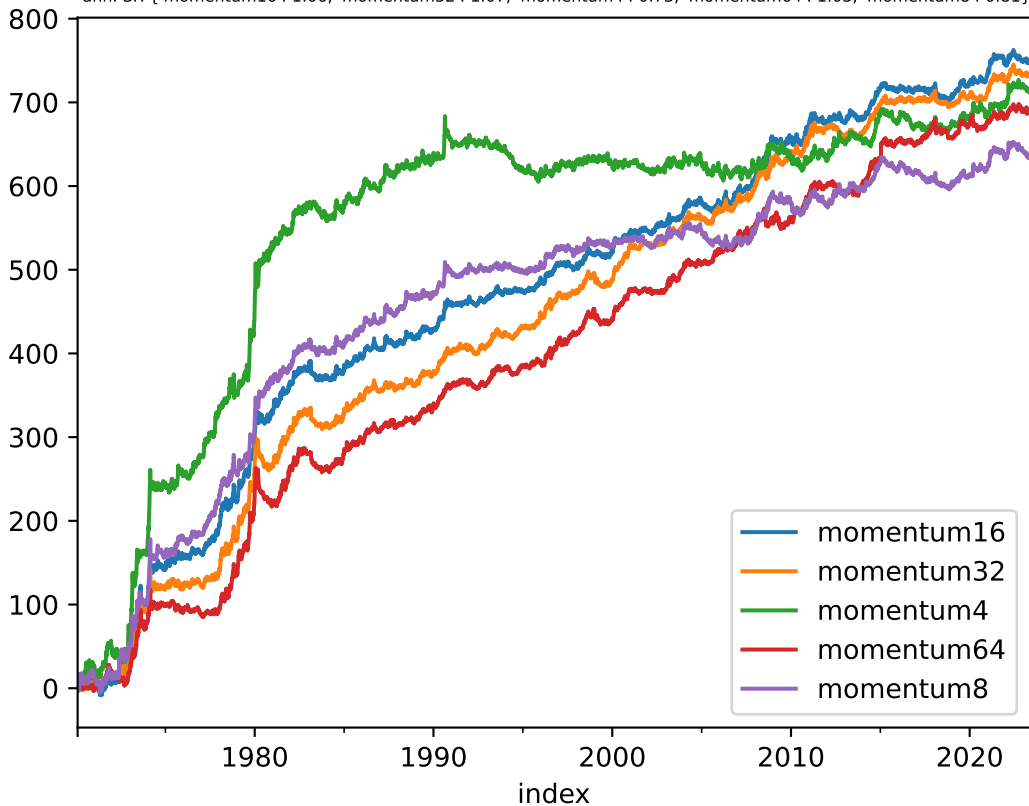


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.778, 'momentum32': 13.508, 'momentum4': 13.108, 'momentum64': 12.711, 'momentum8': 11.666}

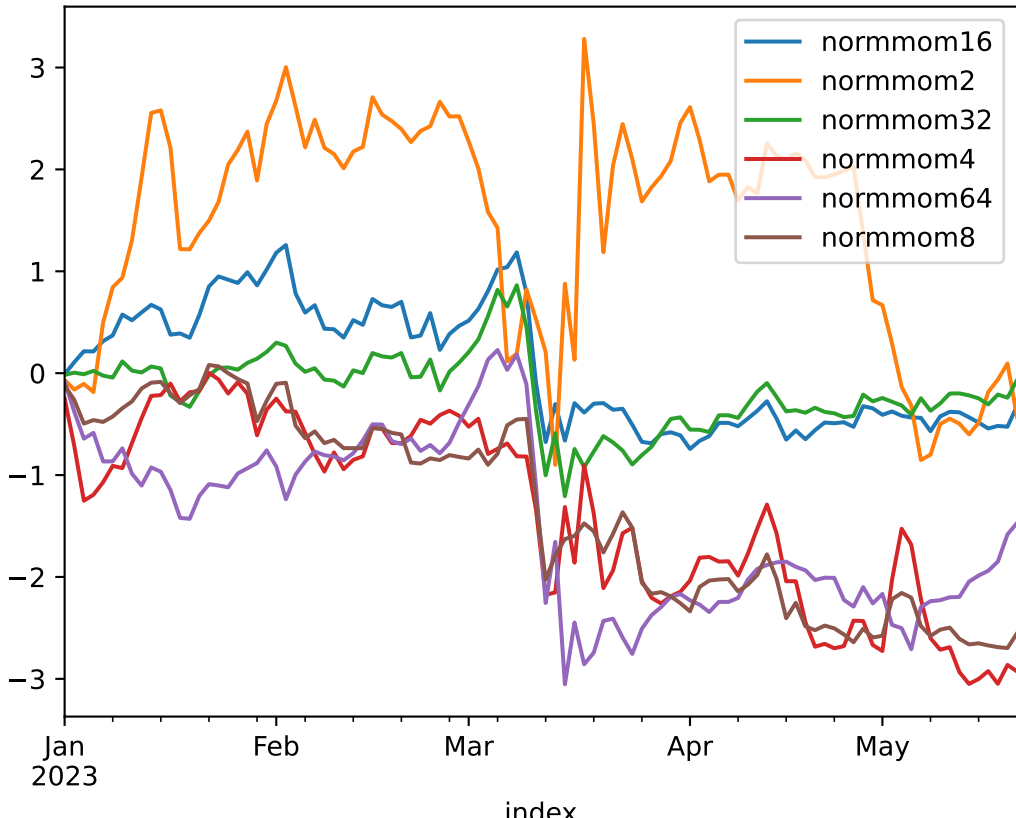
ann. std {'momentum16': 13.039, 'momentum32': 12.603, 'momentum4': 17.884, 'momentum64': 12.324, 'momentum8': 14.323}

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': -0.816, 'normmom2': -1.101, 'normmom32': -0.169, 'normmom4': -7.496, 'normmom64': -3.763, 'normmom8': -6.533}
 ann. std {'normmom16': 2.936, 'normmom2': 8.566, 'normmom32': 2.884, 'normmom4': 4.529, 'normmom64': 4.34, 'normmom8': 2.945}
 ann. SR {'normmom16': -0.28, 'normmom2': -0.13, 'normmom32': -0.06, 'normmom4': -1.65, 'normmom64': -0.87, 'normmom8': -2.22}

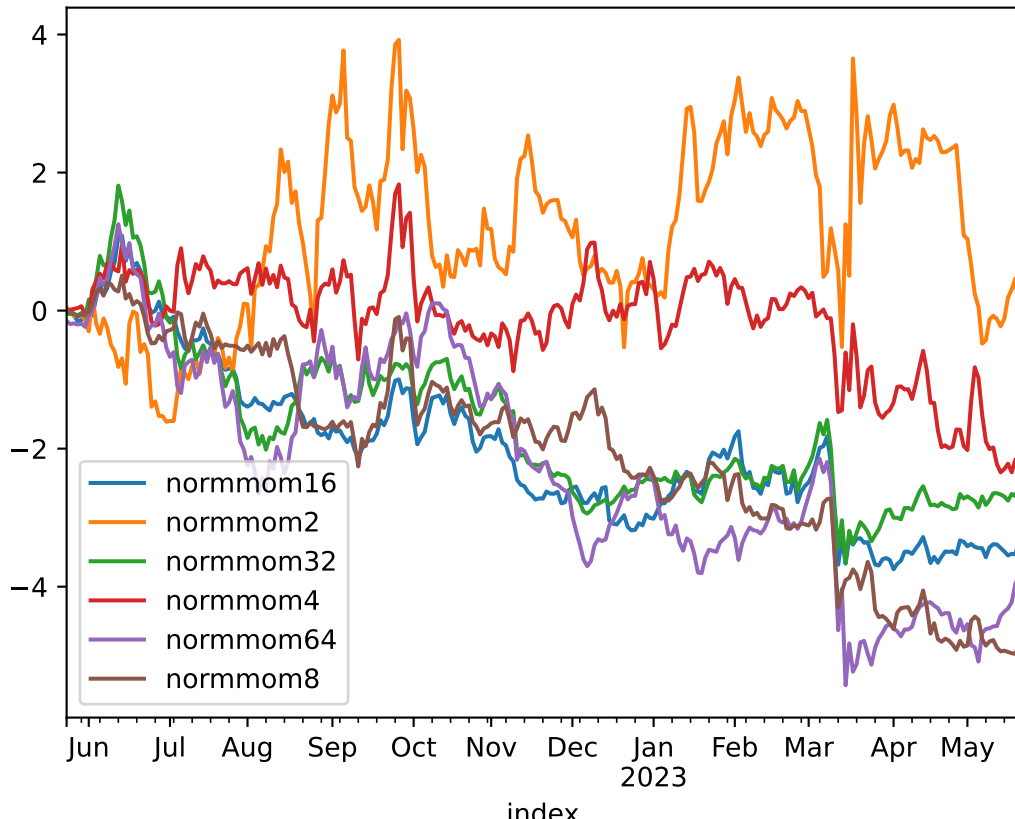


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.285, 'normmom2': -0.057, 'normmom32': -2.484, 'normmom4': -2.196, 'normmom64': -3.801, 'normmom8': -4.772}

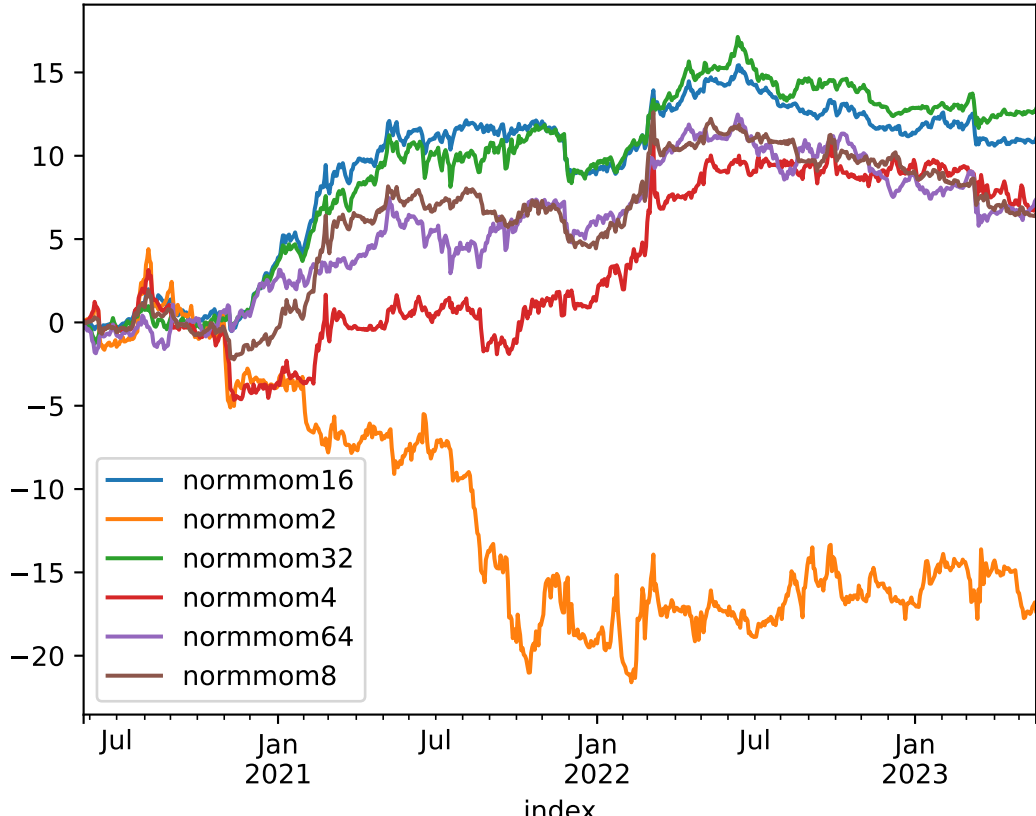
ann. std {'normmom16': 2.526, 'normmom2': 7.456, 'normmom32': 2.823, 'normmom4': 4.335, 'normmom64': 3.832, 'normmom8': 2.877}

ann. SR {'normmom16': -1.3, 'normmom2': -0.01, 'normmom32': -0.88, 'normmom4': -0.51, 'normmom64': -0.99, 'normmom8': -1.66}



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

ann. mean {'normmom16': 3.619, 'normmom2': -5.686, 'normmom32': 4.204, 'normmom4': 2.24, 'normmom64': 2.422, 'normmom8': 2.14}
ann. std {'normmom16': 3.511, 'normmom2': 8.655, 'normmom32': 3.879, 'normmom4': 5.418, 'normmom64': 4.261, 'normmom8': 3.943}
ann. SR {'normmom16': 1.03, 'normmom2': -0.66, 'normmom32': 1.08, 'normmom4': 0.41, 'normmom64': 0.57, 'normmom8': 0.54}

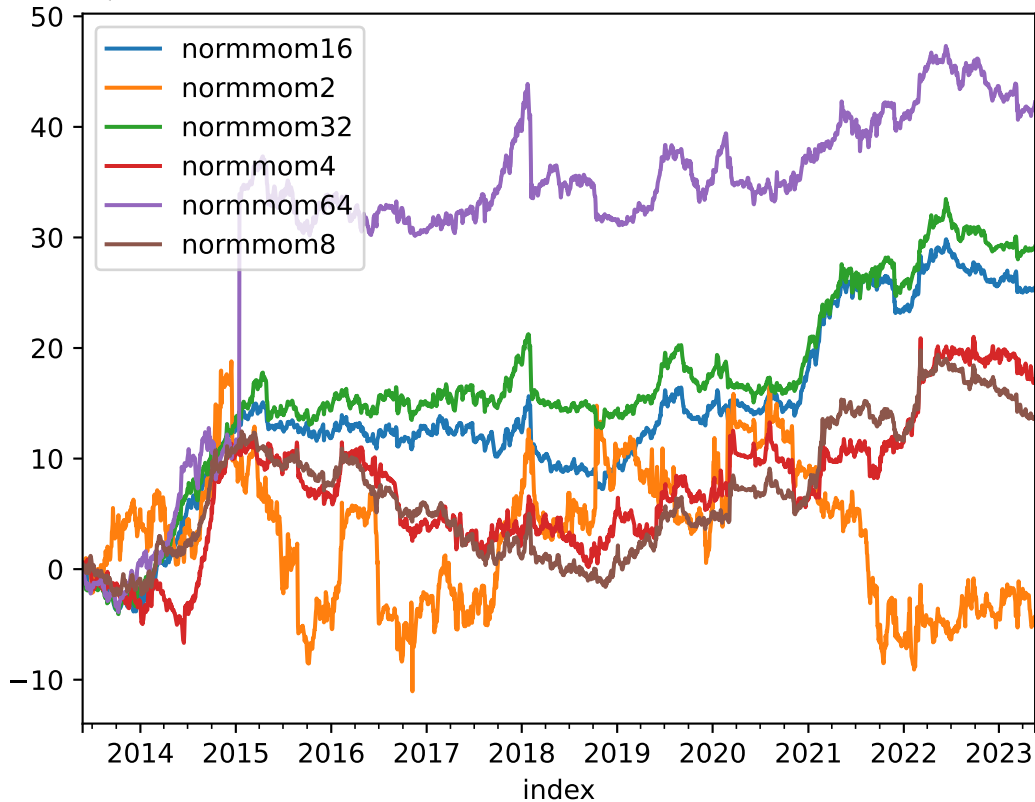


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.498, 'normmom2': -0.472, 'normmom32': 2.864, 'normmom4': 1.666, 'normmom64': 4.148, 'normmom8': 1.346}

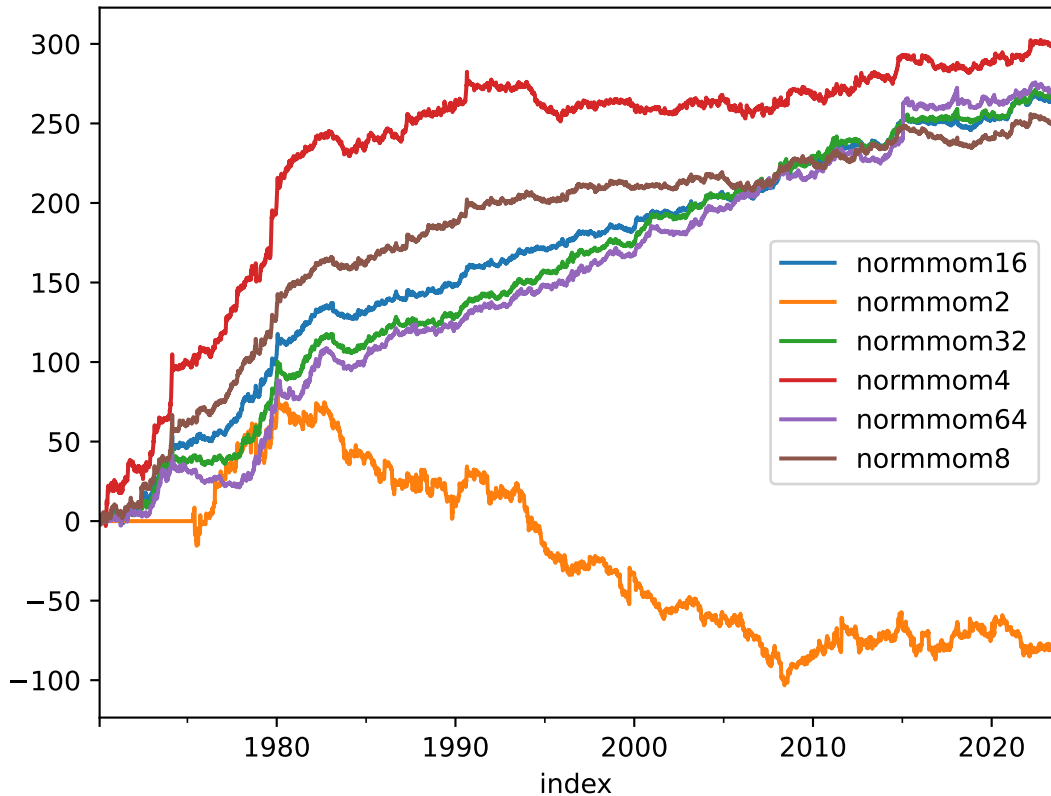
ann. std {'normmom16': 3.457, 'normmom2': 10.312, 'normmom32': 3.616, 'normmom4': 5.447, 'normmom64': 8.275, 'normmom8': 3.872}

ann. SR {'normmom16': 0.72, 'normmom2': -0.05, 'normmom32': 0.79, 'normmom4': 0.31, 'normmom64': 0.5, 'normmom8': 0.35}



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

ann. mean {'normmom16': 4.861, 'normmom2': -1.488, 'normmom32': 4.917, 'normmom4': 5.495, 'normmom64': 4.986, 'normmom8': 4.6}
ann. std {'normmom16': 4.529, 'normmom2': 11.604, 'normmom32': 4.607, 'normmom4': 7.381, 'normmom64': 5.867, 'normmom8': 5.362}
ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.74, 'normmom64': 0.85, 'normmom8': 0.86}

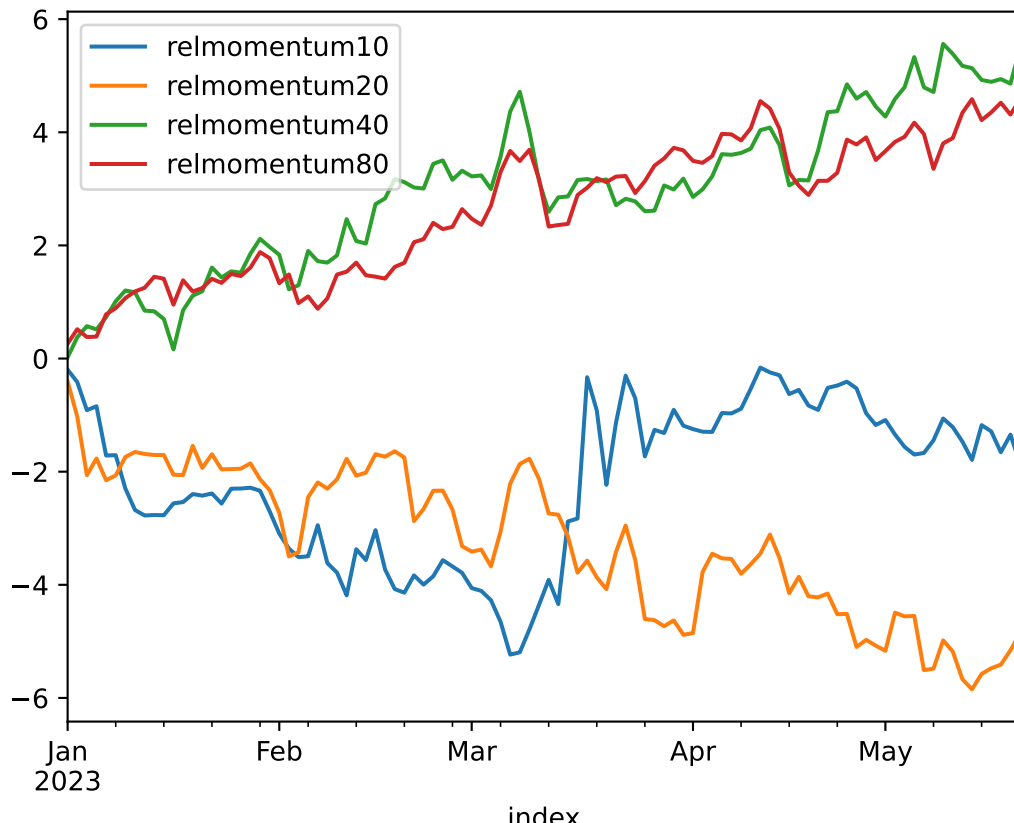


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -4.777, 'relmomentum20': -12.436, 'relmomentum40': 14.057, 'relmomentum80': 11.732}

ann. std {'relmomentum10': 7.66, 'relmomentum20': 6.51, 'relmomentum40': 5.401, 'relmomentum80': 4.413}

ann. SR {'relmomentum10': -0.62, 'relmomentum20': -1.91, 'relmomentum40': 2.6, 'relmomentum80': 2.66}

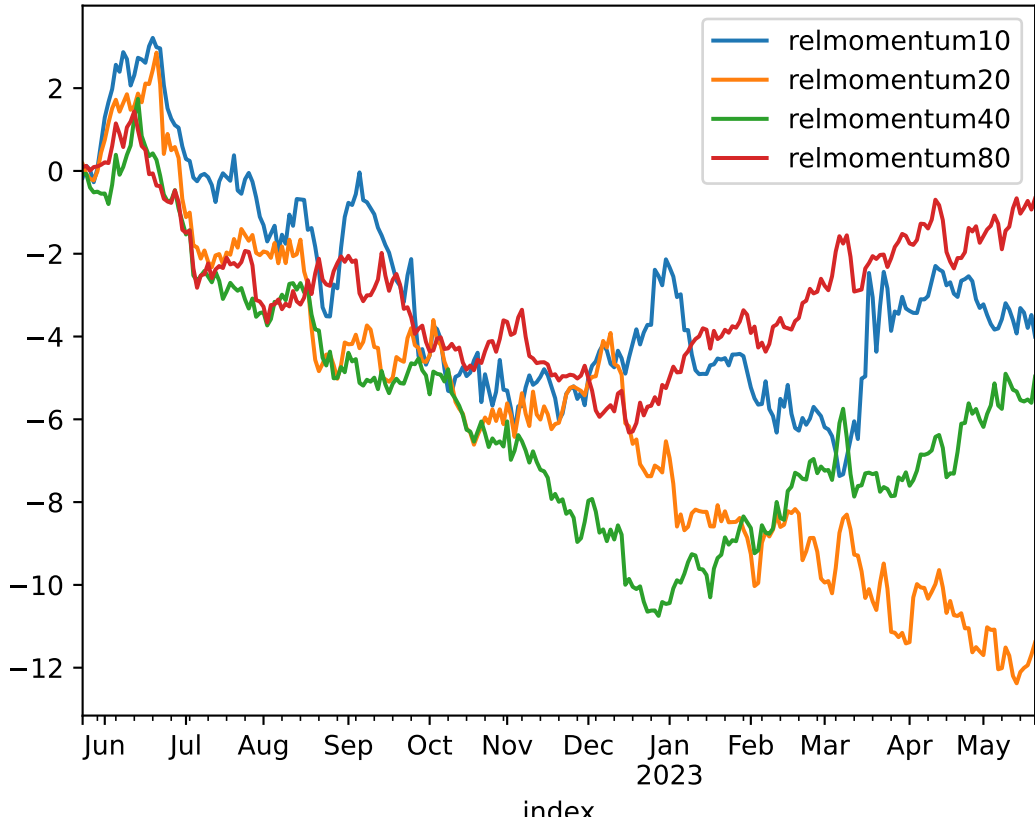


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.955, 'relmomentum20': -11.256, 'relmomentum40': -4.913, 'relmomentum80': -0.656}

ann. std {'relmomentum10': 7.179, 'relmomentum20': 6.328, 'relmomentum40': 5.29, 'relmomentum80': 4.573}

ann. SR {'relmomentum10': -0.55, 'relmomentum20': -1.78, 'relmomentum40': -0.93, 'relmomentum80': -0.14}

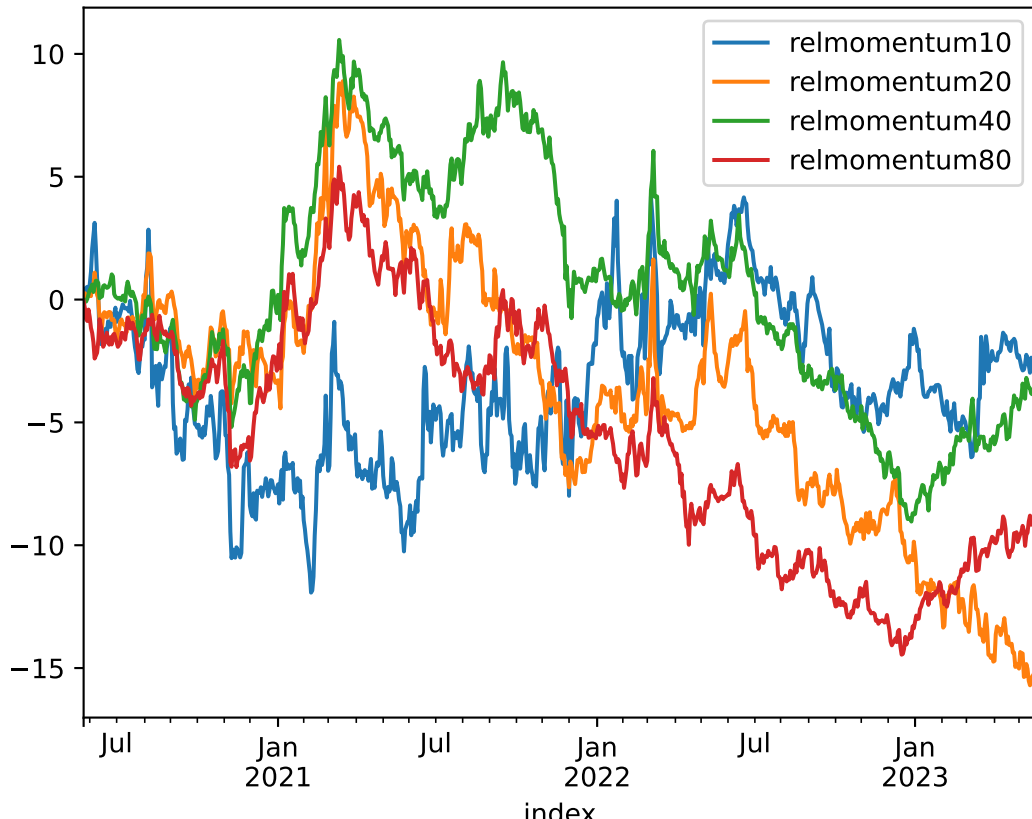


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.002, 'relmomentum20': -4.829, 'relmomentum40': -1.069, 'relmomentum80': -2.887}

ann. std {'relmomentum10': 11.934, 'relmomentum20': 8.382, 'relmomentum40': 6.983, 'relmomentum80': 6.326}

ann. SR {'relmomentum10': -0.08, 'relmomentum20': -0.58, 'relmomentum40': -0.15, 'relmomentum80': -0.46}

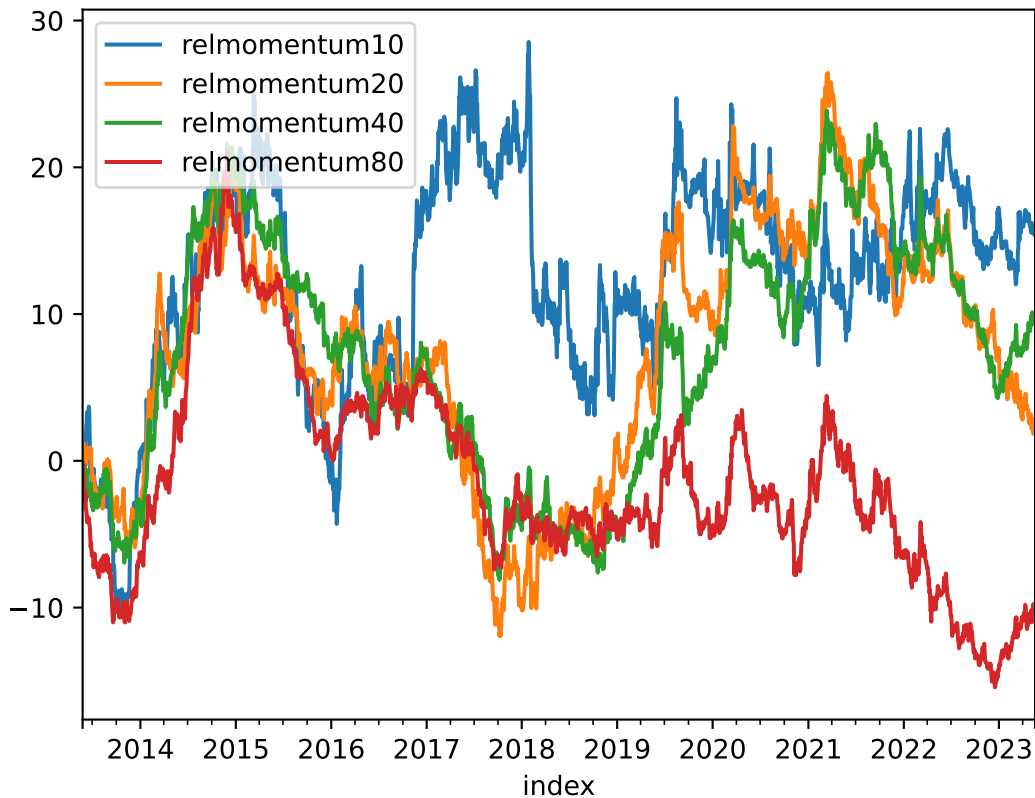


Total Trading Rule P&L for period '10Y'

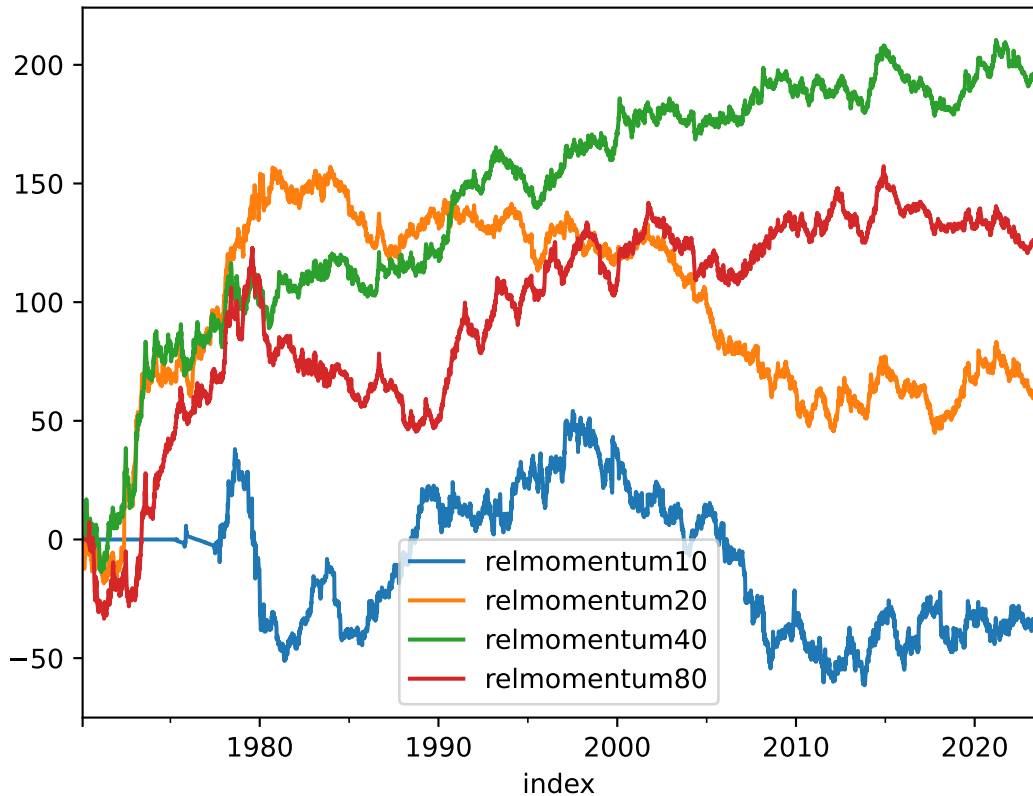
ann. mean {'relmomentum10': 1.512, 'relmomentum20': 0.278, 'relmomentum40': 0.987, 'relmomentum80': -0.96}

ann. std {'relmomentum10': 13.372, 'relmomentum20': 8.535, 'relmomentum40': 6.995, 'relmomentum80': 6.352}

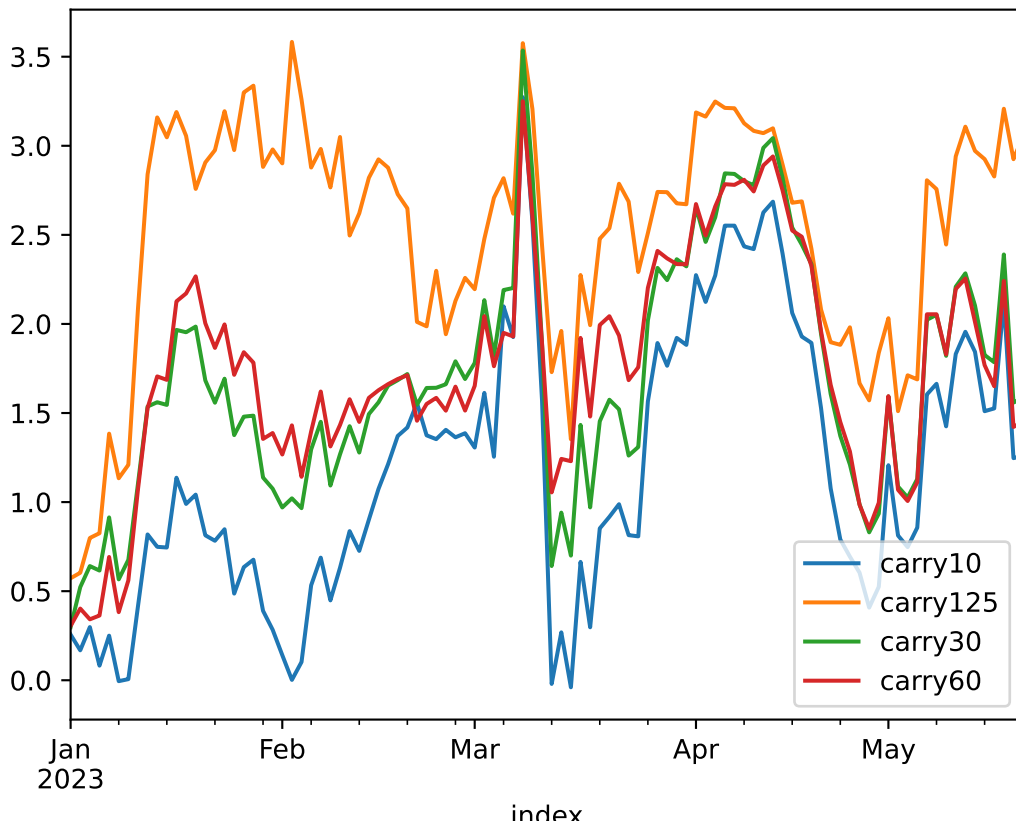
ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.03, 'relmomentum40': 0.14, 'relmomentum80': -0.15}



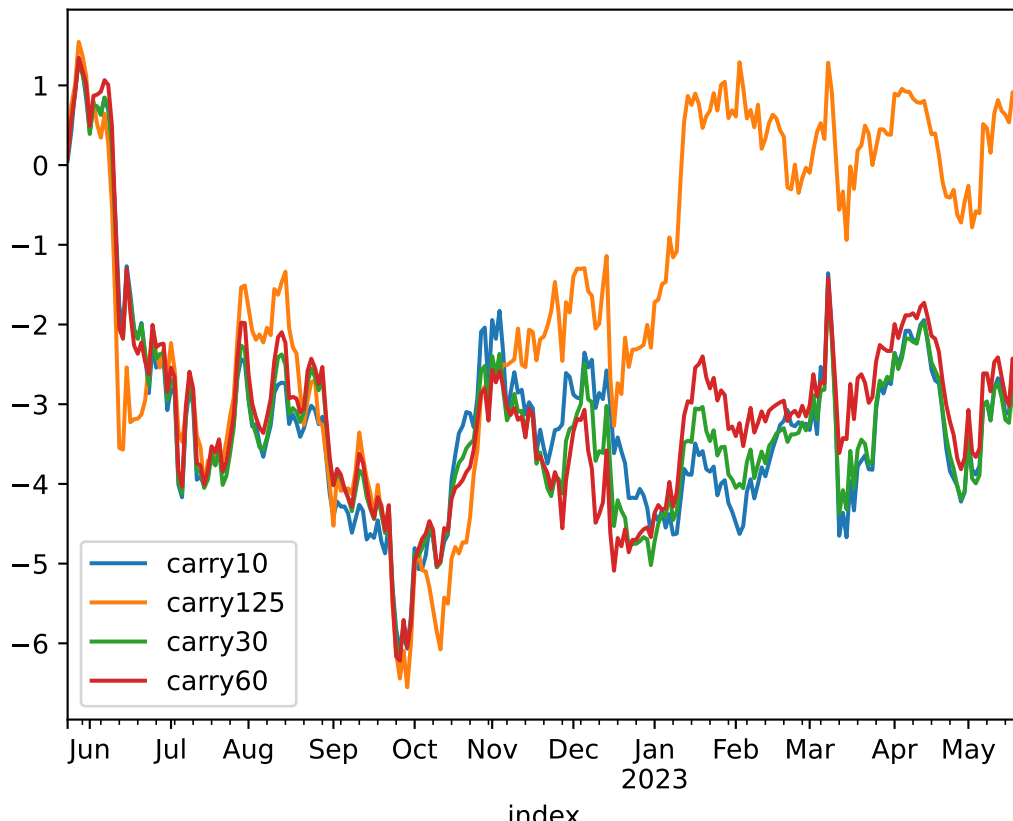
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.649, 'relmomentum20': 1.099, 'relmomentum40': 3.621, 'relmomentum80': 2.325}
ann. std {'relmomentum10': 13.382, 'relmomentum20': 10.464, 'relmomentum40': 9.634, 'relmomentum80': 9.779}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 3.224, 'carry125': 7.819, 'carry30': 4.058, 'carry60': 3.716}
ann. std {'carry10': 6.026, 'carry125': 5.548, 'carry30': 5.663, 'carry60': 5.22}
ann. SR {'carry10': 0.53, 'carry125': 1.41, 'carry30': 0.72, 'carry60': 0.71}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.332, 'carry125': 0.754, 'carry30': -3.394, 'carry60': -3.179}
ann. std {'carry10': 5.963, 'carry125': 6.362, 'carry30': 5.926, 'carry60': 5.871}
ann. SR {'carry10': -0.56, 'carry125': 0.12, 'carry30': -0.57, 'carry60': -0.54}

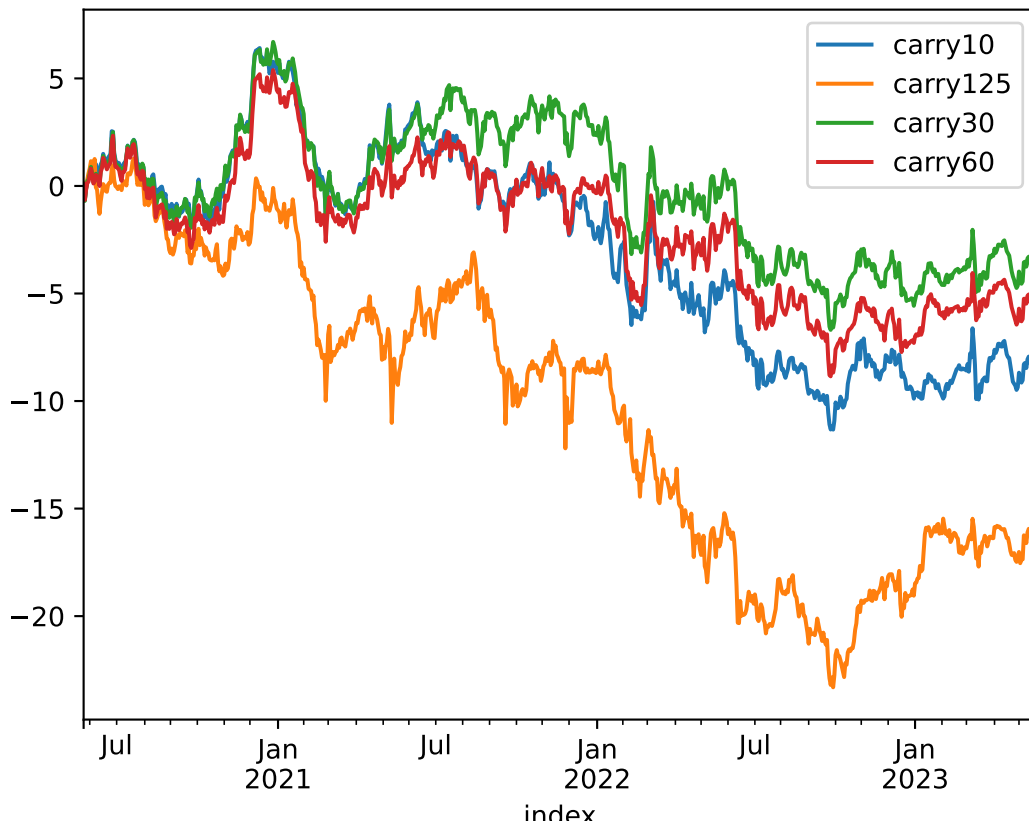


Total Trading Rule P&L for period '3Y'

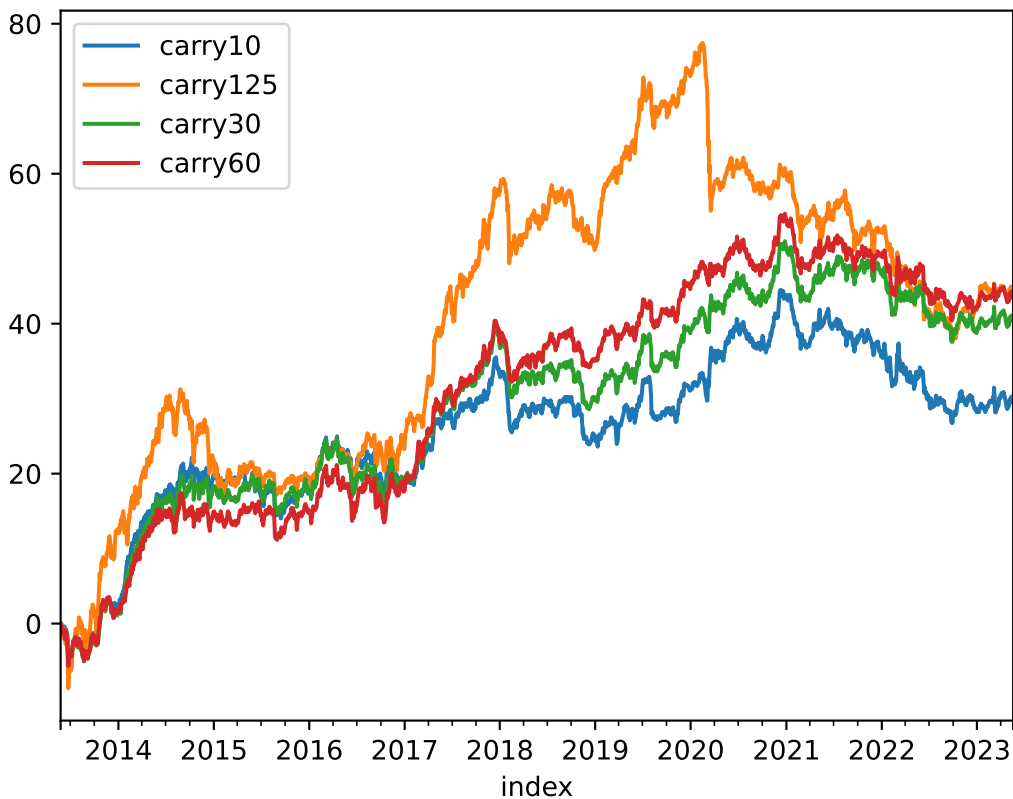
ann. mean {'carry10': -2.833, 'carry125': -5.25, 'carry30': -1.309, 'carry60': -1.919}

ann. std {'carry10': 6.565, 'carry125': 8.021, 'carry30': 6.502, 'carry60': 6.496}

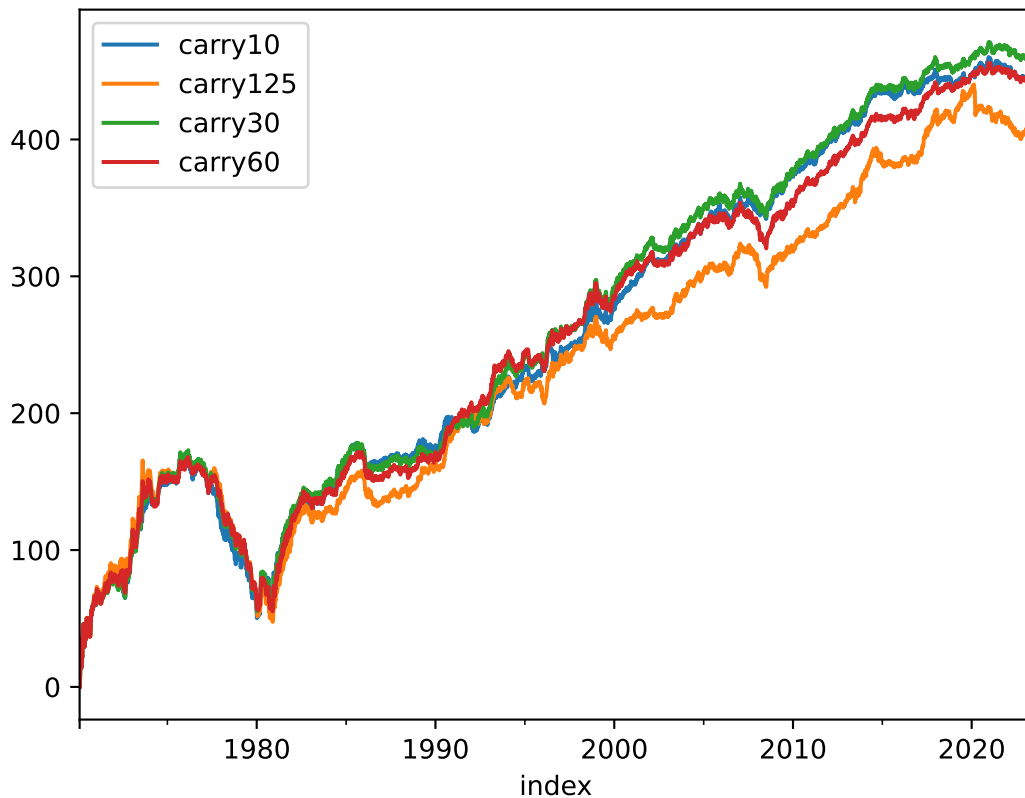
ann. SR {'carry10': -0.43, 'carry125': -0.65, 'carry30': -0.2, 'carry60': -0.3}



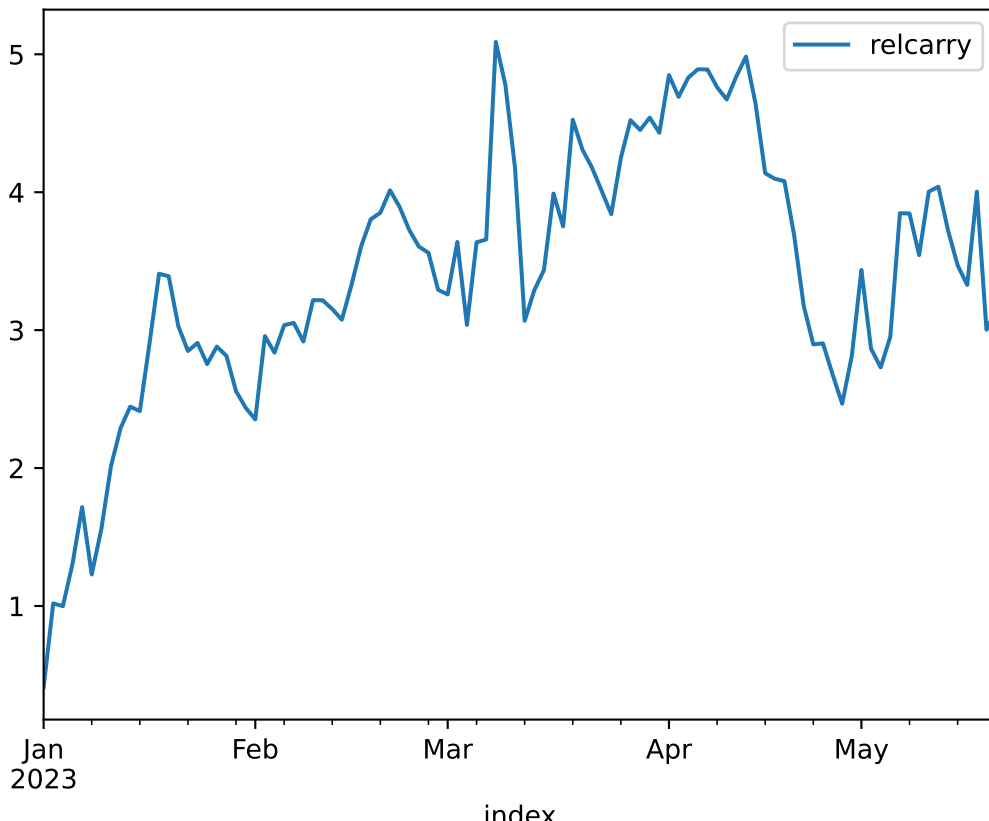
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.894, 'carry125': 4.407, 'carry30': 3.961, 'carry60': 4.267}
ann. std {'carry10': 6.376, 'carry125': 8.941, 'carry30': 6.461, 'carry60': 6.404}
ann. SR {'carry10': 0.45, 'carry125': 0.49, 'carry30': 0.61, 'carry60': 0.67}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.193, 'carry125': 7.504, 'carry30': 8.48, 'carry60': 8.19}
ann. std {'carry10': 11.196, 'carry125': 11.552, 'carry30': 11.253, 'carry60': 11.256}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 8.061}
ann. std {'relcarry': 6.015}
ann. SR {'relcarry': 1.34}

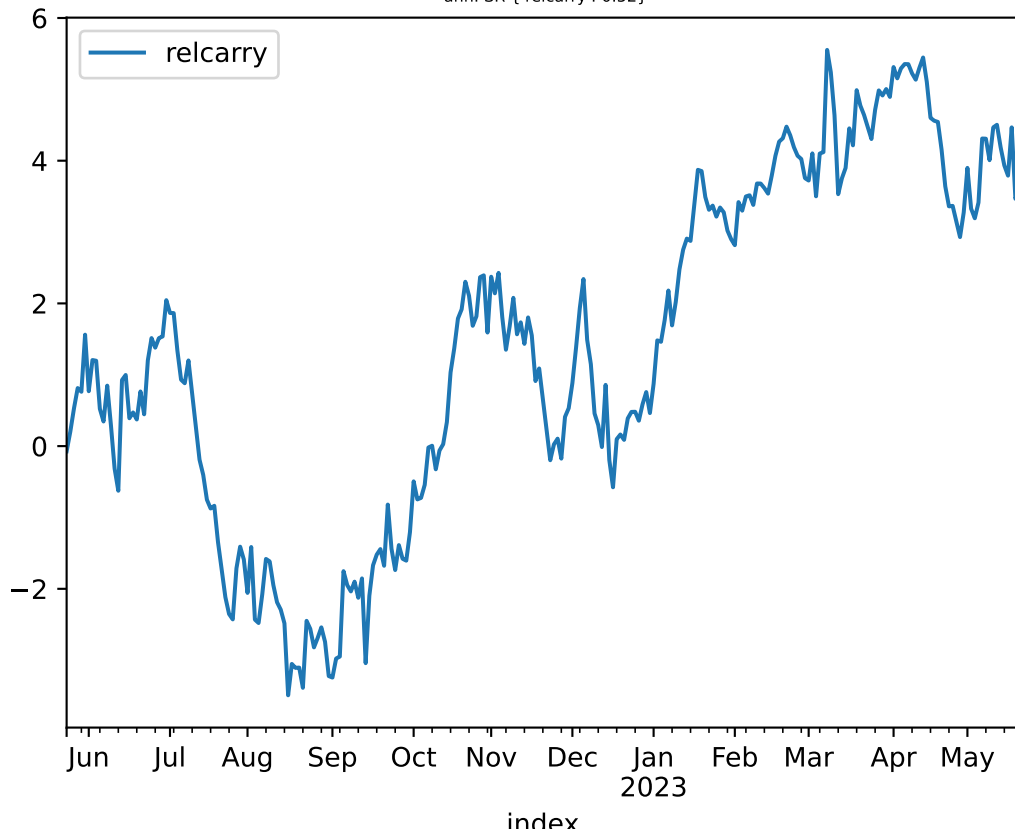


Total Trading Rule P&L for period '1Y'

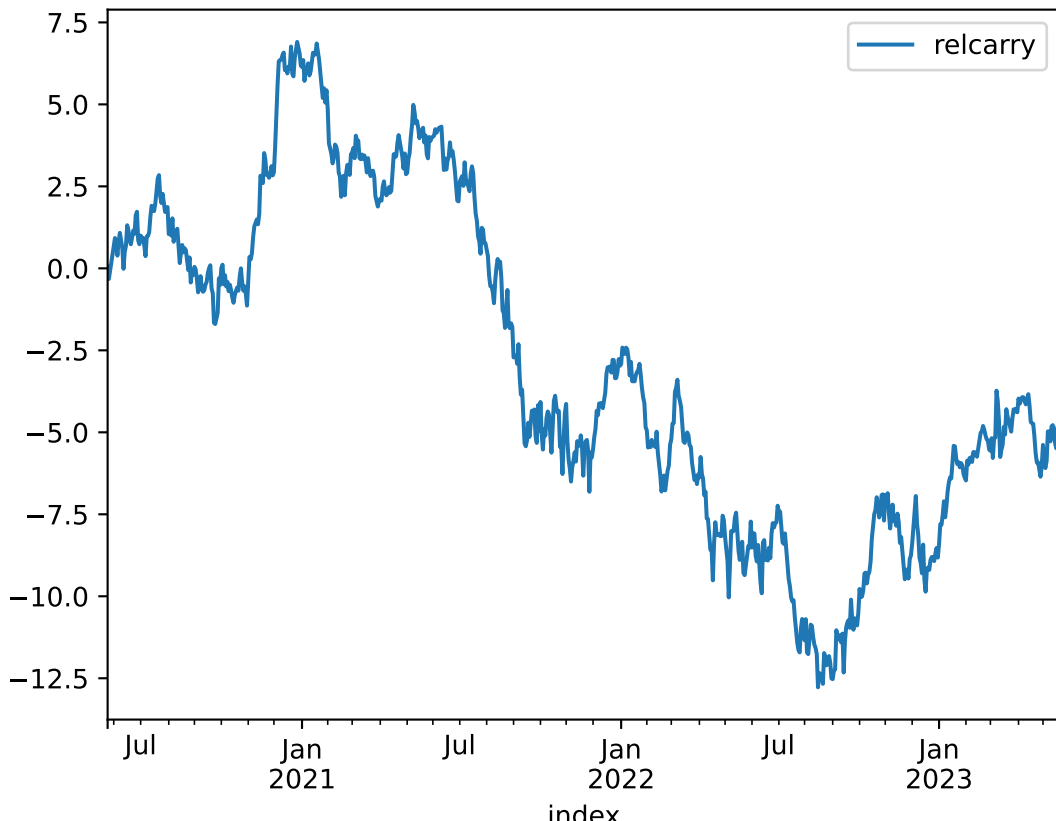
ann. mean {'relcarry': 3.57}

ann. std {'relcarry': 6.8}

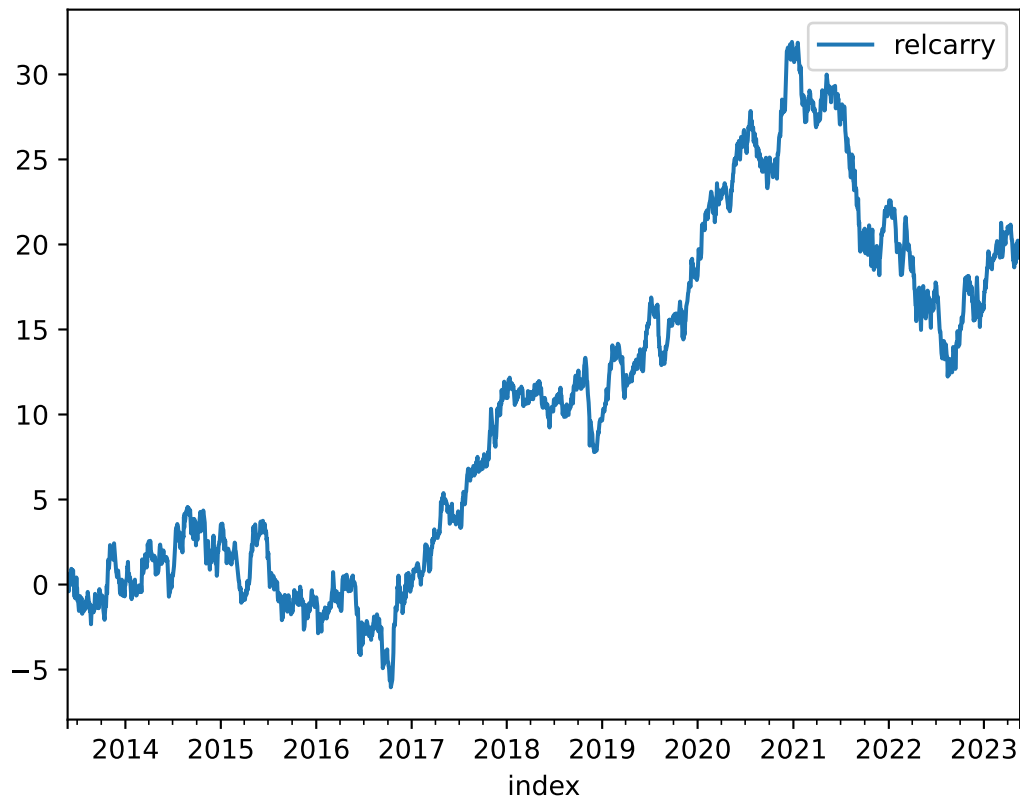
ann. SR {'relcarry': 0.52}



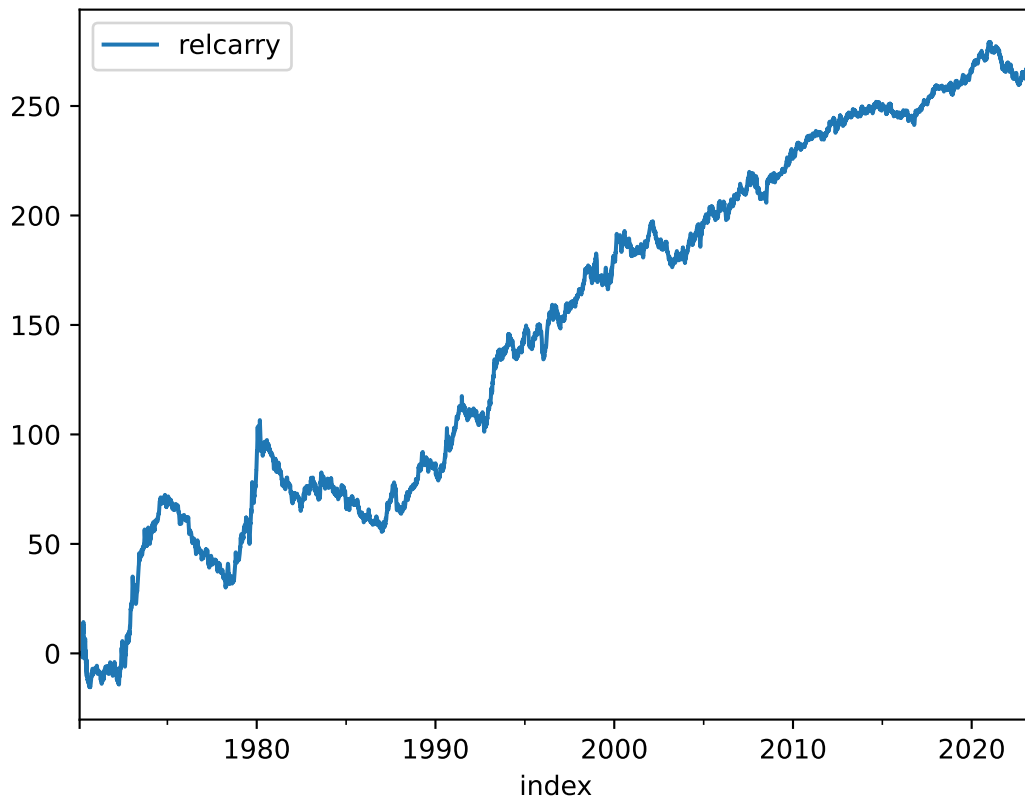
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.861}
ann. std {'relcarry': 6.717}
ann. SR {'relcarry': -0.28}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.899}
ann. std {'relcarry': 5.829}
ann. SR {'relcarry': 0.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.91}
ann. std {'relcarry': 8.958}
ann. SR {'relcarry': 0.55}

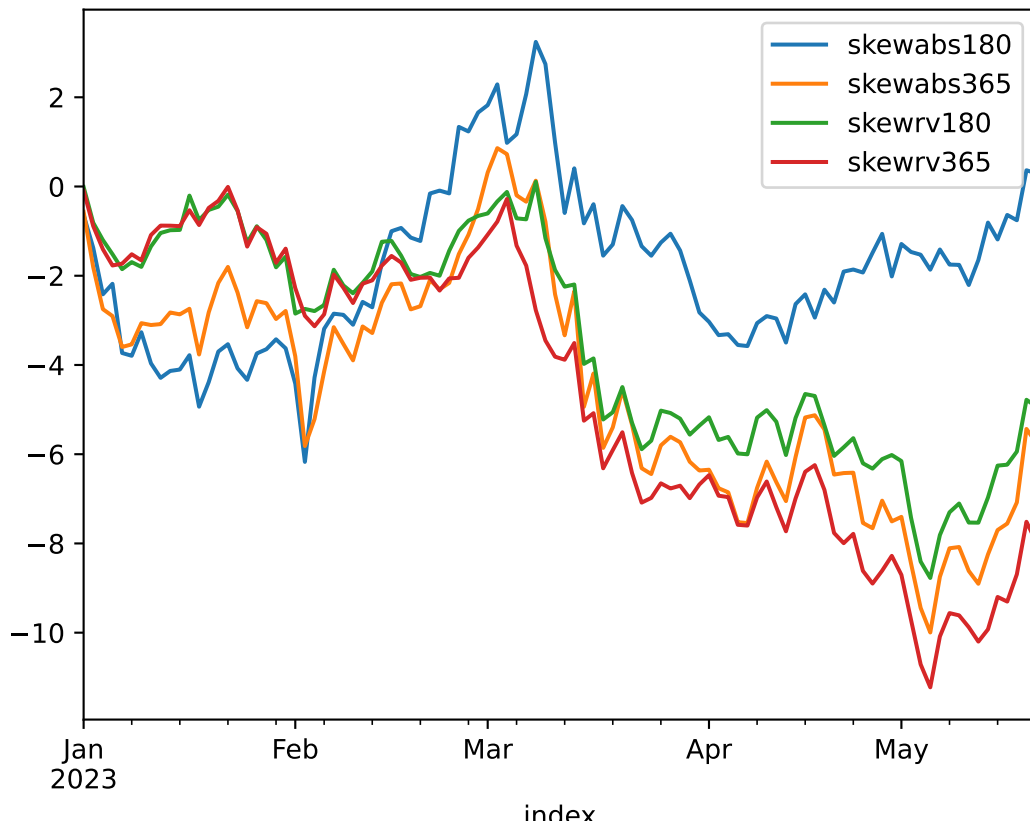


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': 0.756, 'skewabs365': -14.689, 'skewrv180': -12.62, 'skewrv365': -20.379}

ann. std {'skewabs180': 11.03, 'skewabs365': 11.802, 'skewrv180': 8.56, 'skewrv365': 8.507}

ann. SR {'skewabs180': 0.07, 'skewabs365': -1.24, 'skewrv180': -1.47, 'skewrv365': -2.4}

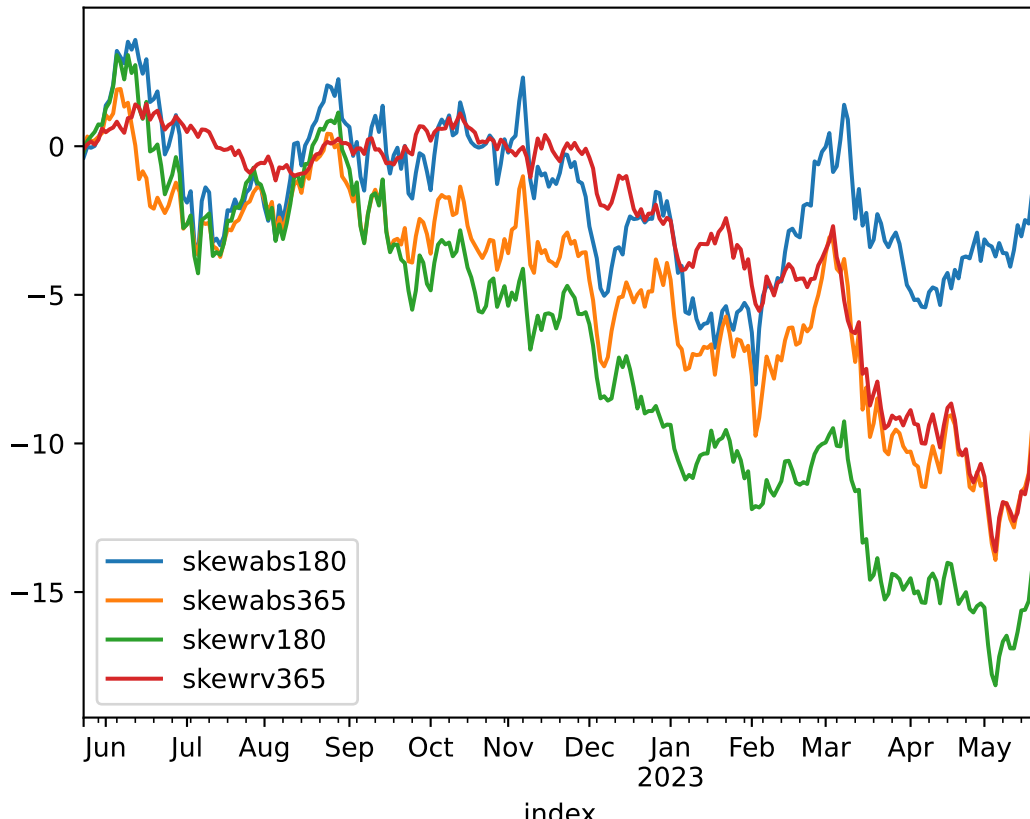


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -1.533, 'skewabs365': -9.55, 'skewrv180': -14.128, 'skewrv365': -10.25}

ann. std {'skewabs180': 11.114, 'skewabs365': 10.171, 'skewrv180': 9.5, 'skewrv365': 6.271}

ann. SR {'skewabs180': -0.14, 'skewabs365': -0.94, 'skewrv180': -1.49, 'skewrv365': -1.63}

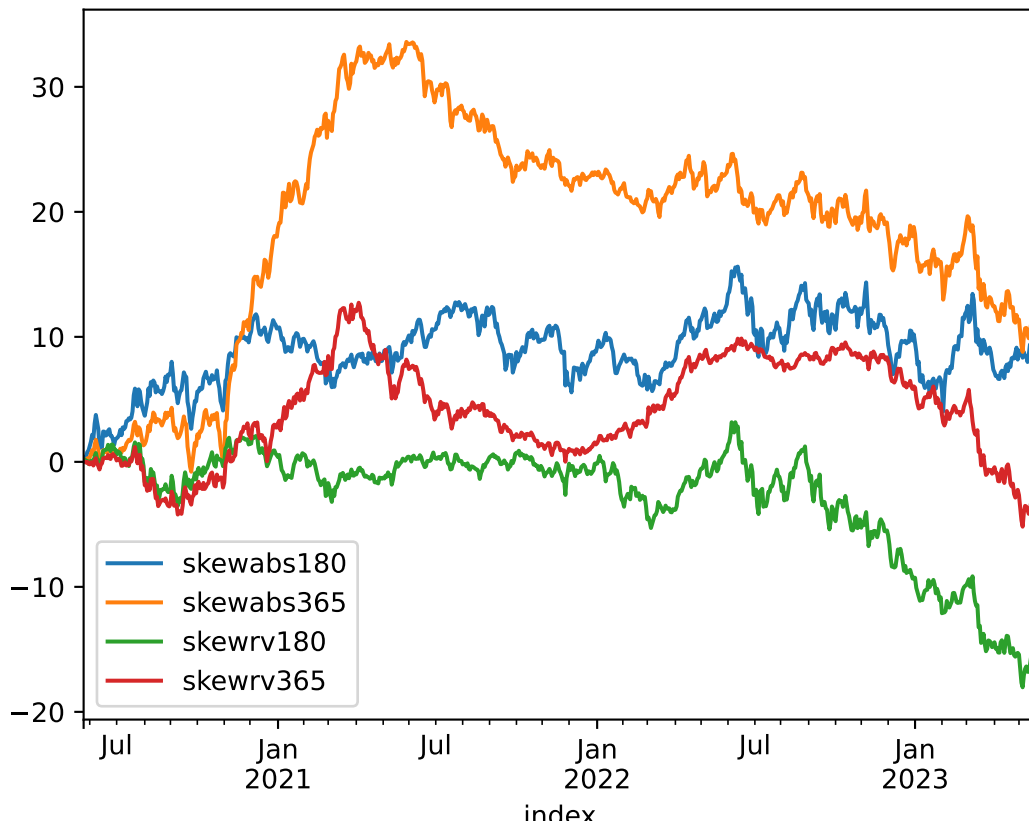


Total Trading Rule P&L for period '3Y'

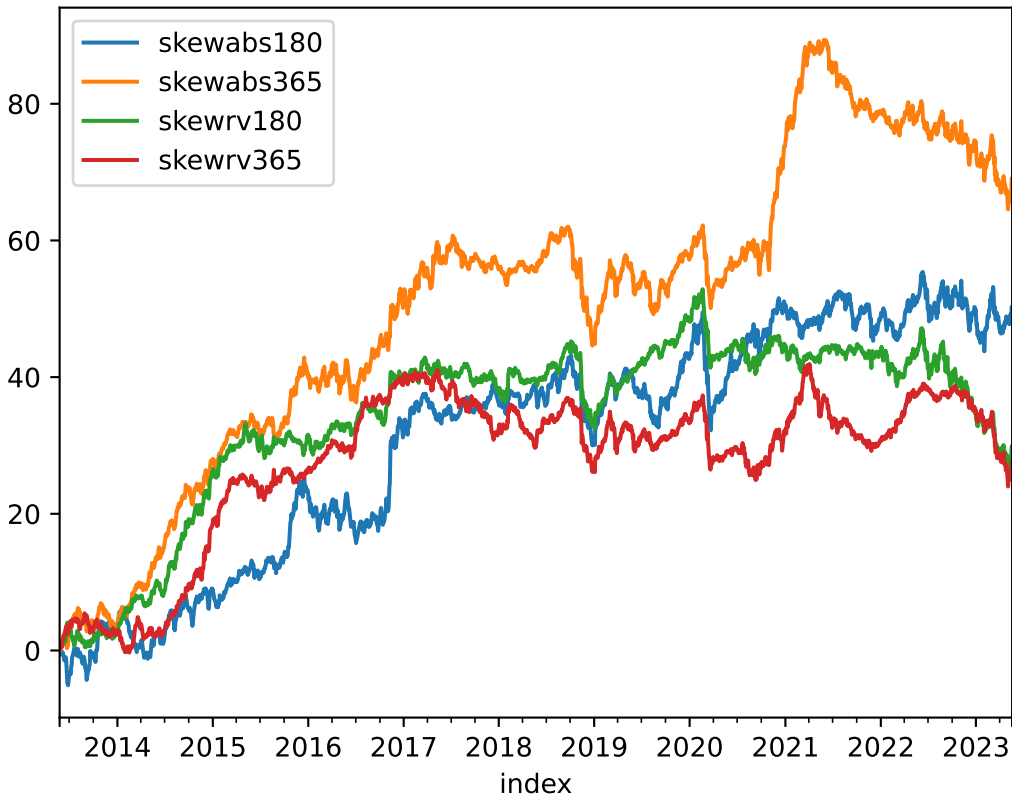
ann. mean {'skewabs180': 3.444, 'skewabs365': 4.284, 'skewrv180': -4.658, 'skewrv365': -0.63}

ann. std {'skewabs180': 9.159, 'skewabs365': 9.056, 'skewrv180': 7.383, 'skewrv365': 6.515}

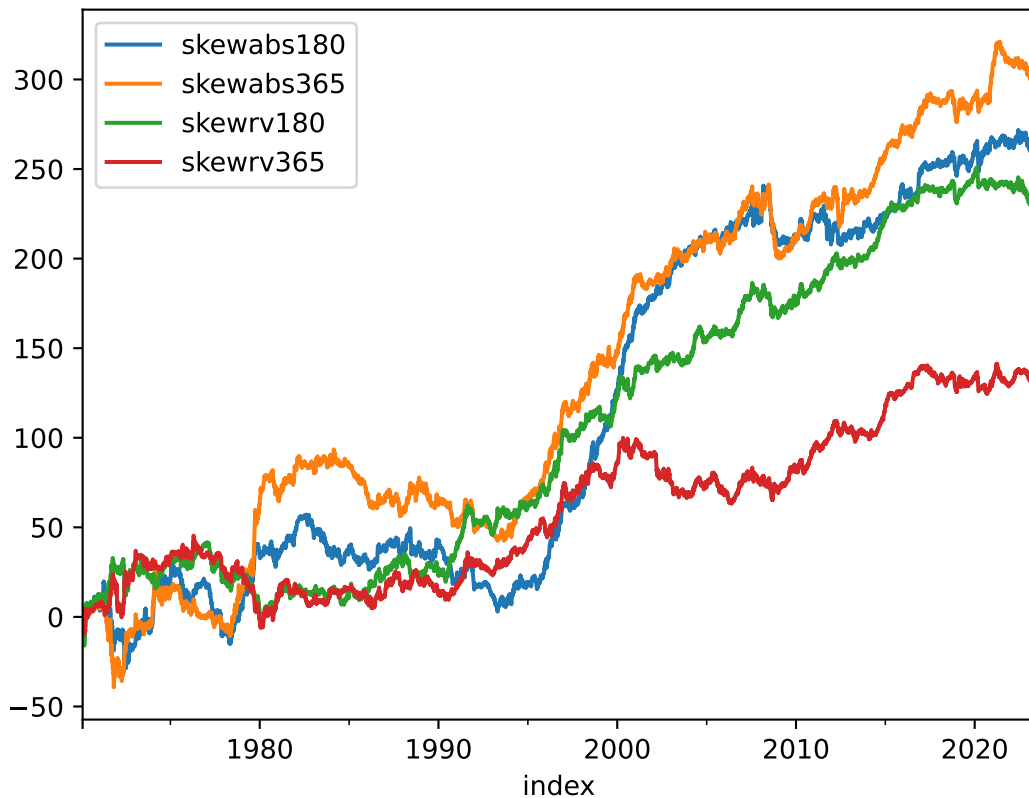
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.47, 'skewrv180': -0.63, 'skewrv365': -0.1}



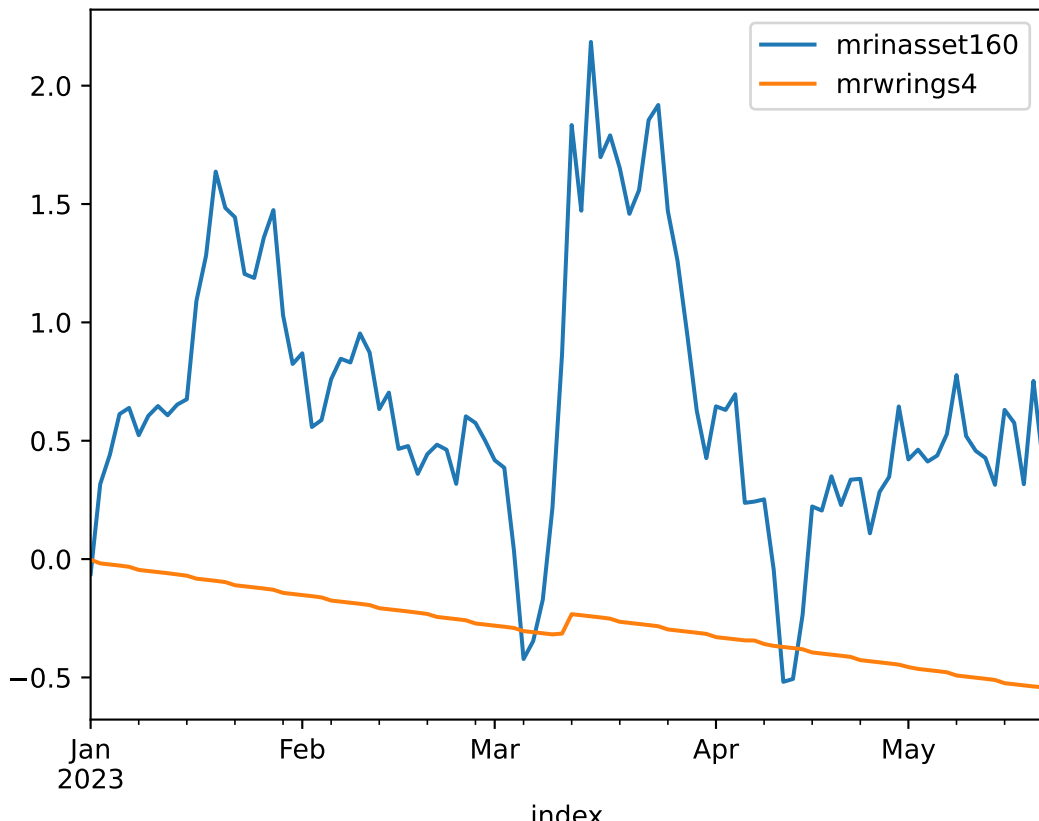
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.936, 'skewabs365': 6.759, 'skewrv180': 2.925, 'skewrv365': 2.678}
ann. std {'skewabs180': 8.035, 'skewabs365': 7.987, 'skewrv180': 6.433, 'skewrv365': 6.095}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.85, 'skewrv180': 0.45, 'skewrv365': 0.44}



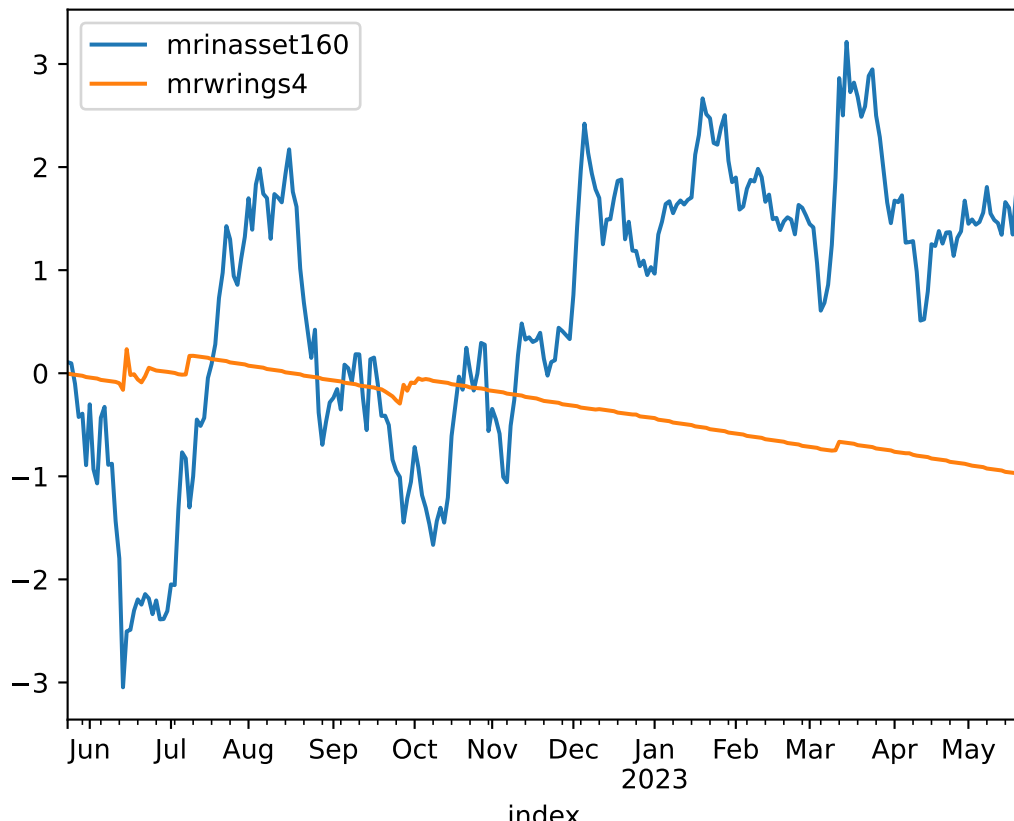
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.907, 'skewabs365': 5.531, 'skewrv180': 4.199, 'skewrv365': 2.333}
ann. std {'skewabs180': 10.099, 'skewabs365': 9.872, 'skewrv180': 8.753, 'skewrv365': 8.128}
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



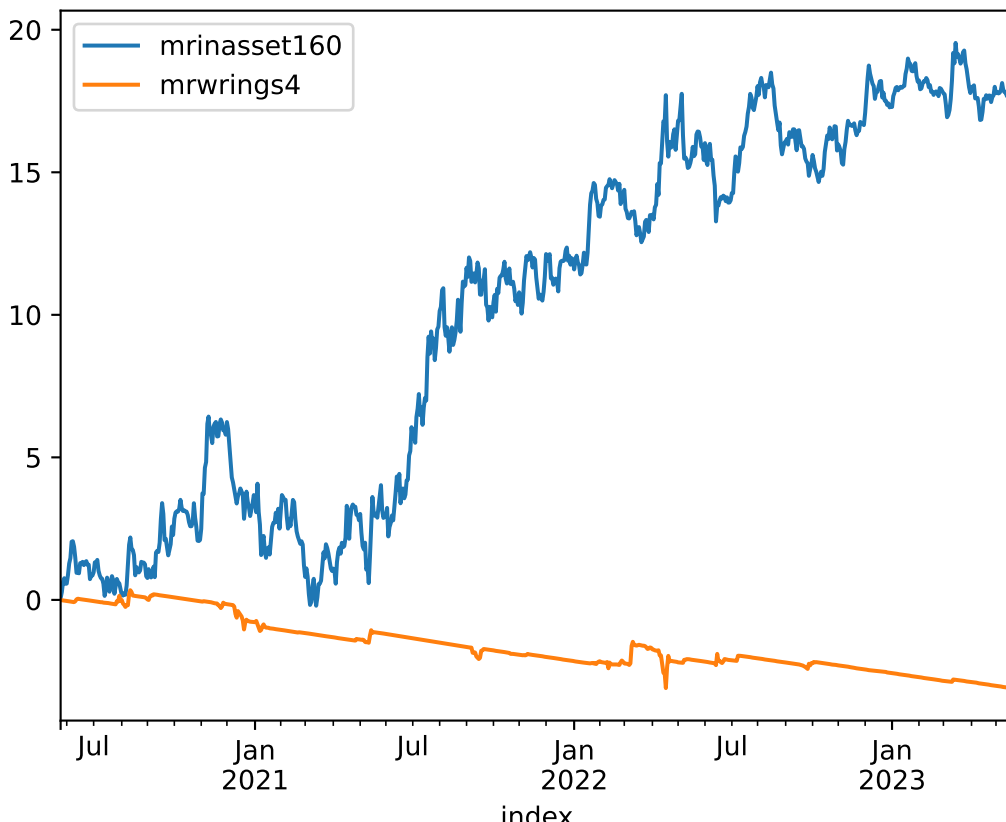
Total Trading Rule P&L for period 'YTD'
ann. mean {'mriasset160': 1.032, 'mrwrings4': -1.387}
ann. std {'mriasset160': 4.106, 'mrwrings4': 0.153}
ann. SR {'mriasset160': 0.25, 'mrwrings4': -9.07}



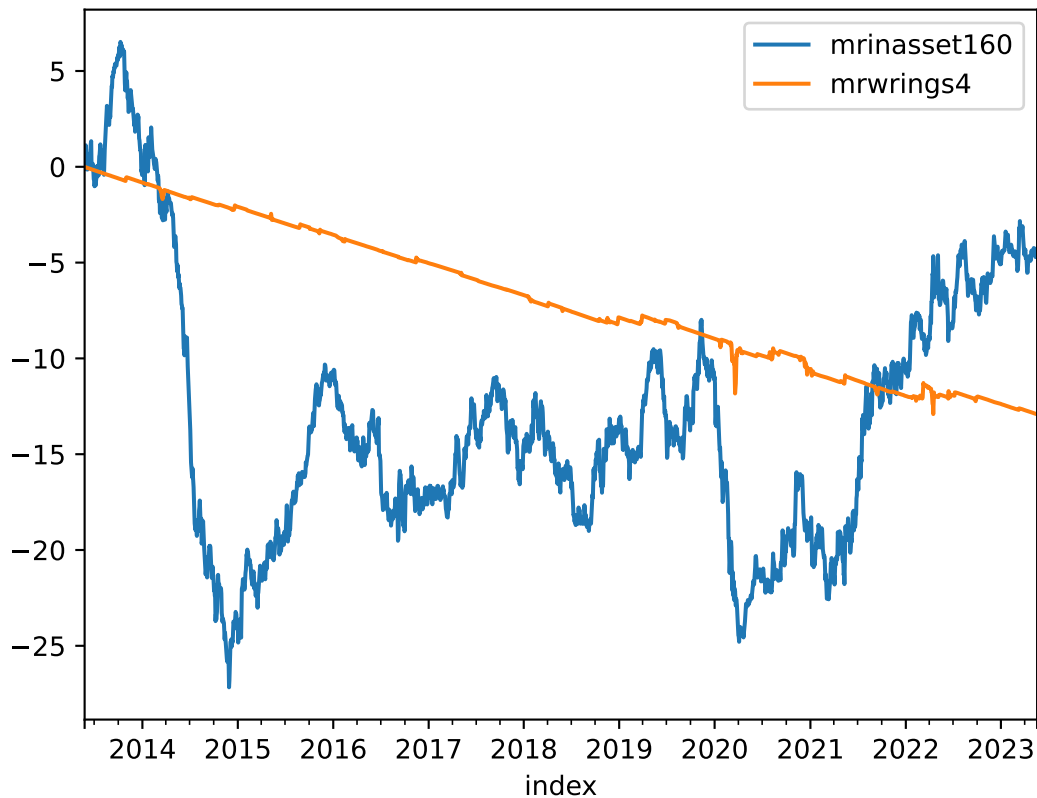
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 1.416, 'mrwrings4': -0.963}
ann. std {'mrinasset160': 4.776, 'mrwrings4': 0.575}
ann. SR {'mrinasset160': 0.3, 'mrwrings4': -1.67}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.828, 'mrwrings4': -1.018}
ann. std {'mrinasset160': 6.277, 'mrwrings4': 1.018}
ann. SR {'mrinasset160': 0.93, 'mrwrings4': -1.0}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.453, 'mrwrings4': -1.269}
ann. std {'mrinasset160': 6.183, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.07, 'mrwrings4': -1.44}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.564, 'mrwrings4': -2.179}
ann. std {'mrinasset160': 9.862, 'mrwrings4': 2.087}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.04}

