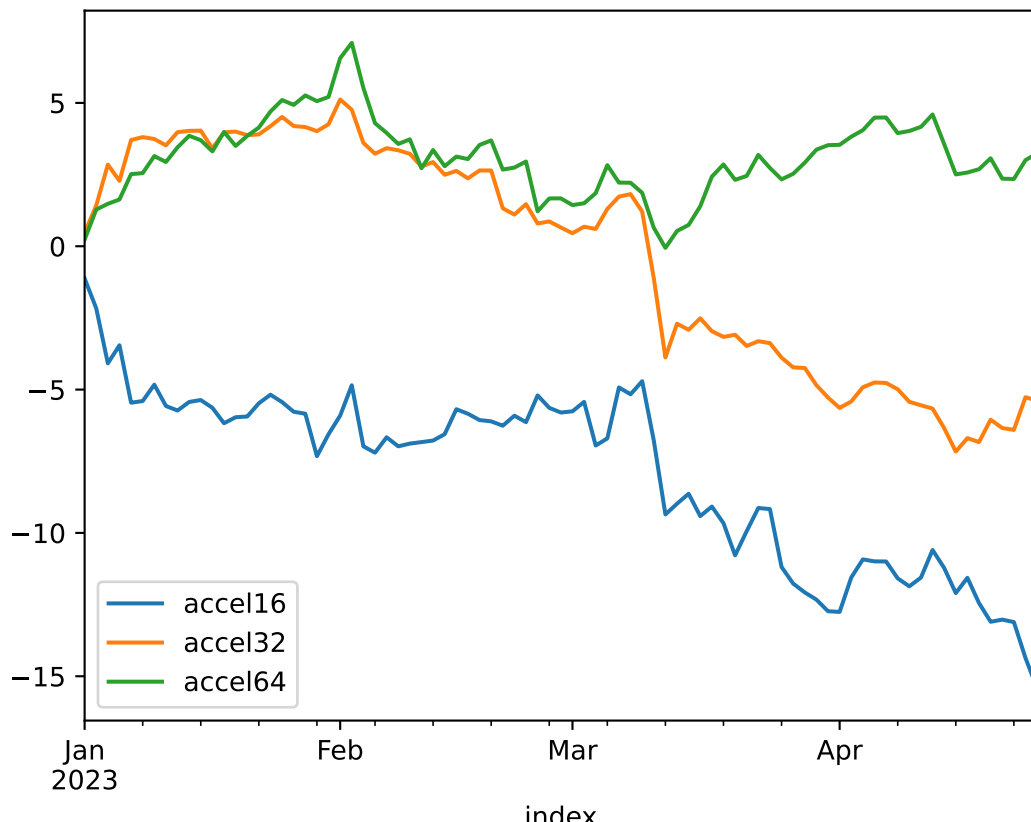
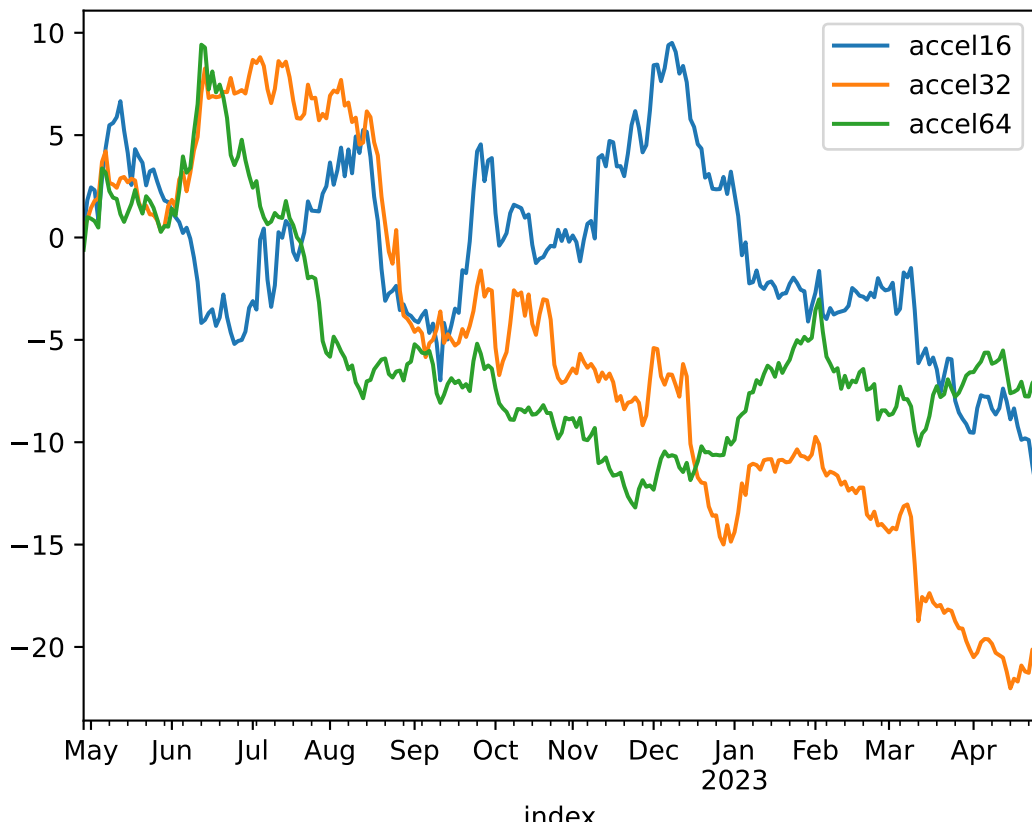


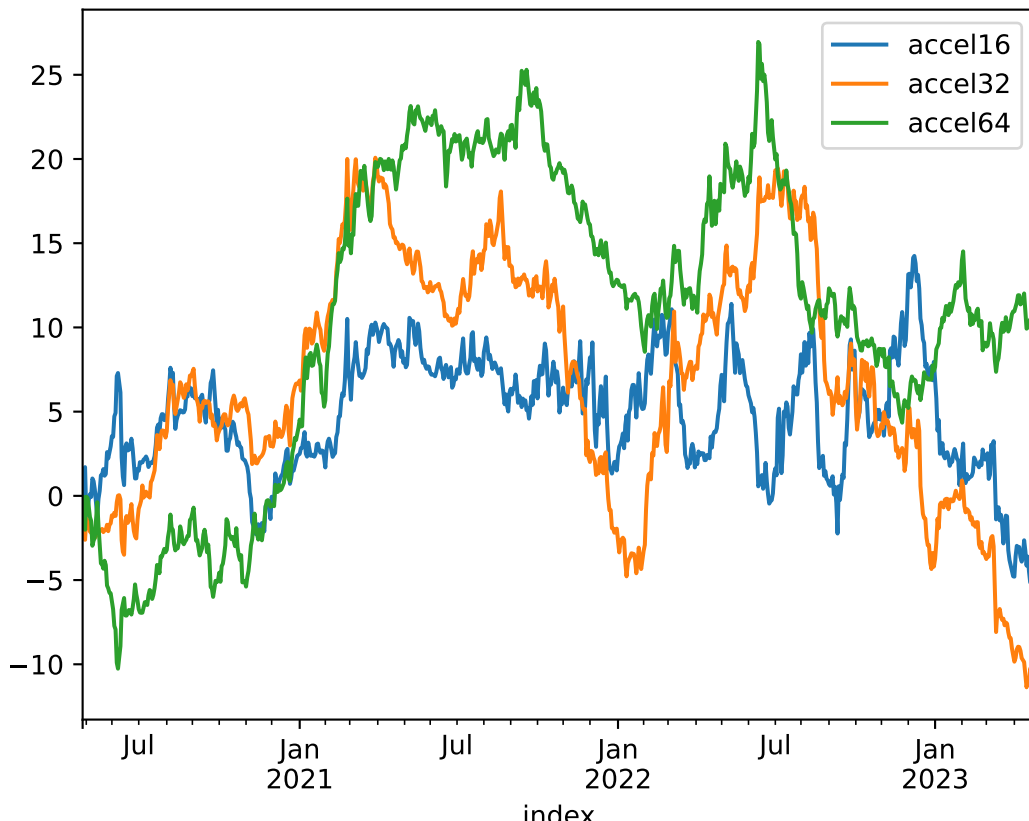
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -47.563, 'accel32': -16.62, 'accel64': 9.994}
ann. std {'accel16': 13.119, 'accel32': 10.184, 'accel64': 9.476}
ann. SR {'accel16': -3.63, 'accel32': -1.63, 'accel64': 1.05}



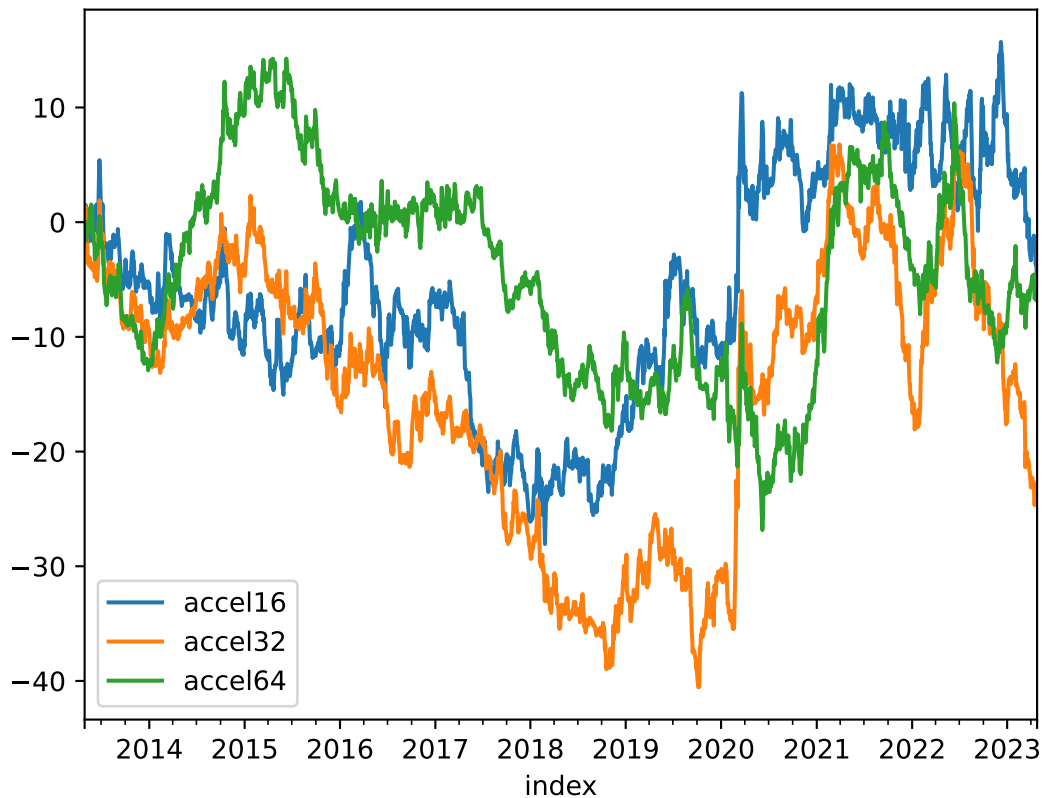
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -12.016, 'accel32': -19.935, 'accel64': -6.768}
ann. std {'accel16': 16.125, 'accel32': 13.045, 'accel64': 10.793}
ann. SR {'accel16': -0.75, 'accel32': -1.53, 'accel64': -0.63}



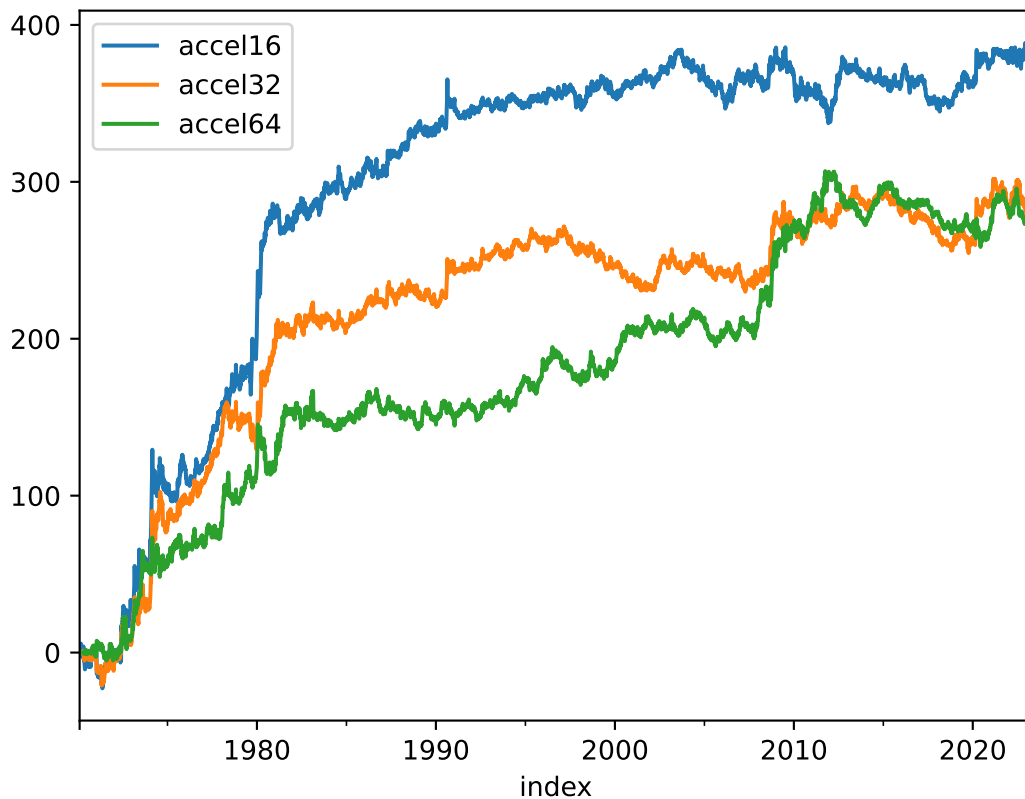
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.443, 'accel32': -3.141, 'accel64': 3.49}
ann. std {'accel16': 13.678, 'accel32': 11.784, 'accel64': 10.623}
ann. SR {'accel16': -0.18, 'accel32': -0.27, 'accel64': 0.33}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.588, 'accel32': -2.246, 'accel64': -0.581}
ann. std {'accel16': 11.72, 'accel32': 10.692, 'accel64': 9.333}
ann. SR {'accel16': -0.05, 'accel32': -0.21, 'accel64': -0.06}

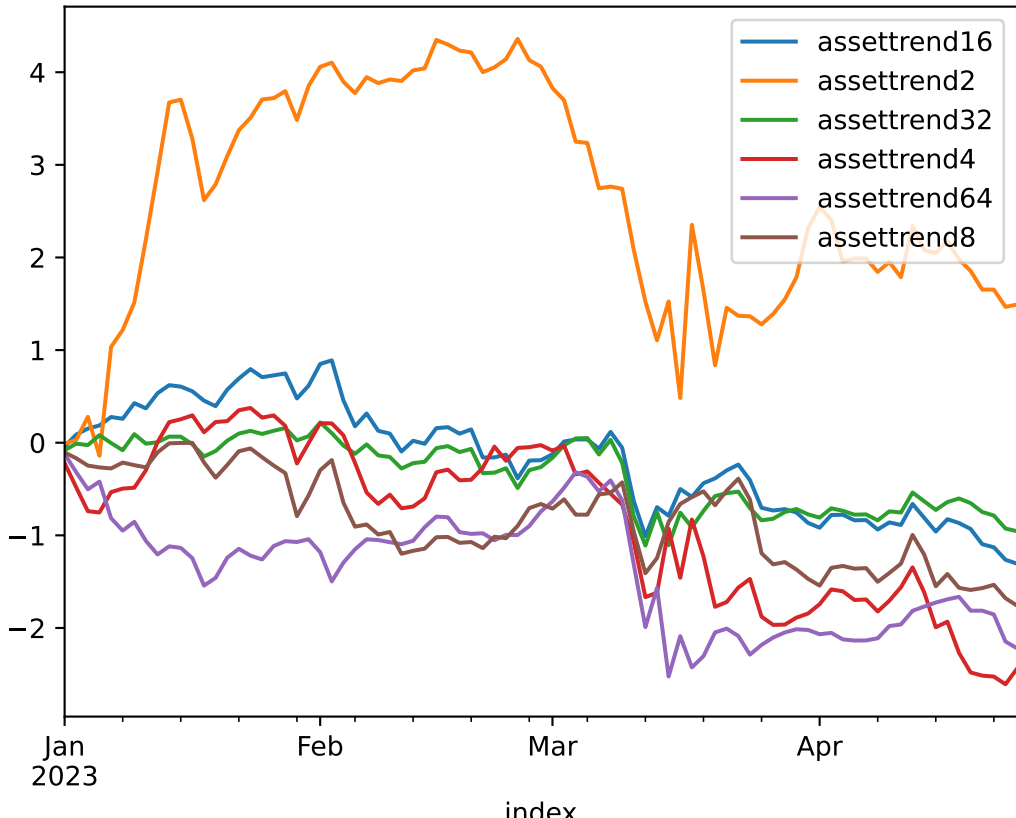


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.762, 'accel32': 5.019, 'accel64': 5.151}
ann. std {'accel16': 14.131, 'accel32': 12.454, 'accel64': 12.103}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}



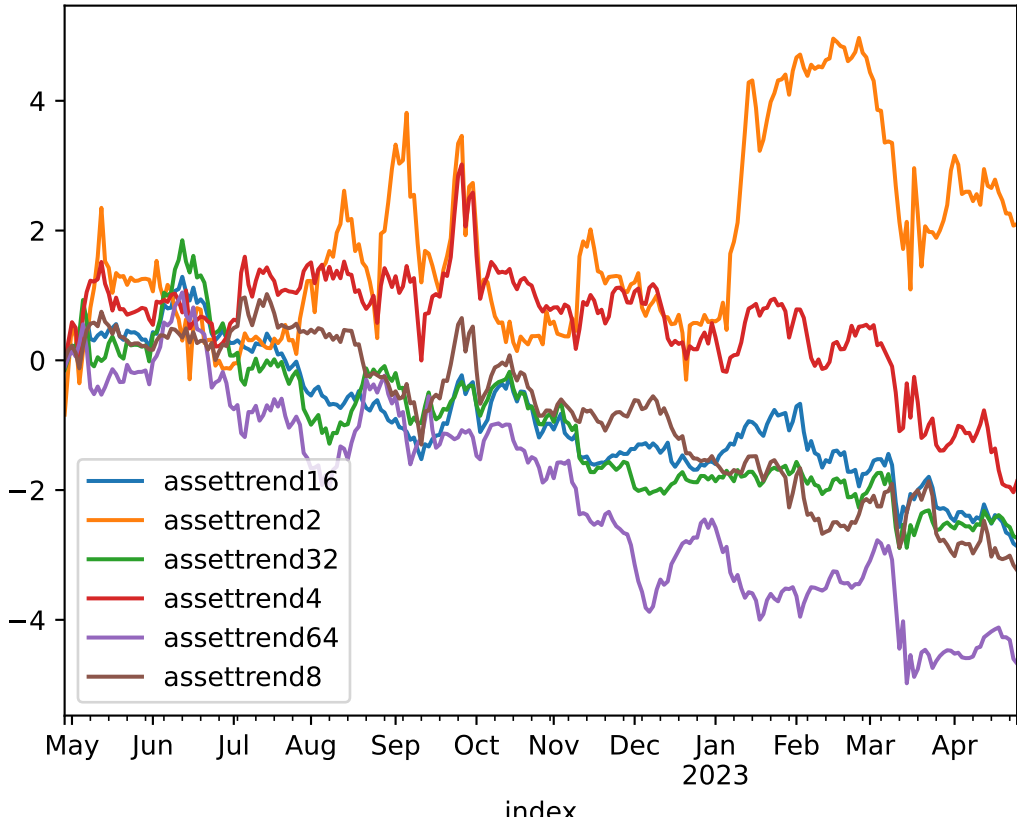
Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -4.028, 'assettrend2': 4.599, 'assettrend32': -2.948, 'assettrend4': -7.52, 'assettrend64': -6.847, 'assettrend8': -5.427}
ann. std {'assettrend16': 2.535, 'assettrend2': 6.561, 'assettrend32': 2.281, 'assettrend4': 3.622, 'assettrend64': 3.347, 'assettrend8': 2.885}
ann. SR {'assettrend16': -1.59, 'assettrend2': 0.7, 'assettrend32': -1.29, 'assettrend4': -2.08, 'assettrend64': -2.05, 'assettrend8': -1.88}



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

ann. mean {'assetrend16': -2.821, 'assetrend2': 2.068, 'assetrend32': -2.697, 'assetrend4': -1.835, 'assetrend64': -4.602, 'assetrend8': -3.186}
ann. std {'assetrend16': 2.298, 'assetrend2': 6.398, 'assetrend32': 2.615, 'assetrend4': 3.989, 'assetrend64': 3.146, 'assetrend8': 2.659}
ann. SR {'assetrend16': -1.23, 'assetrend2': 0.32, 'assetrend32': -1.03, 'assetrend4': -0.46, 'assetrend64': -1.46, 'assetrend8': -1.2}

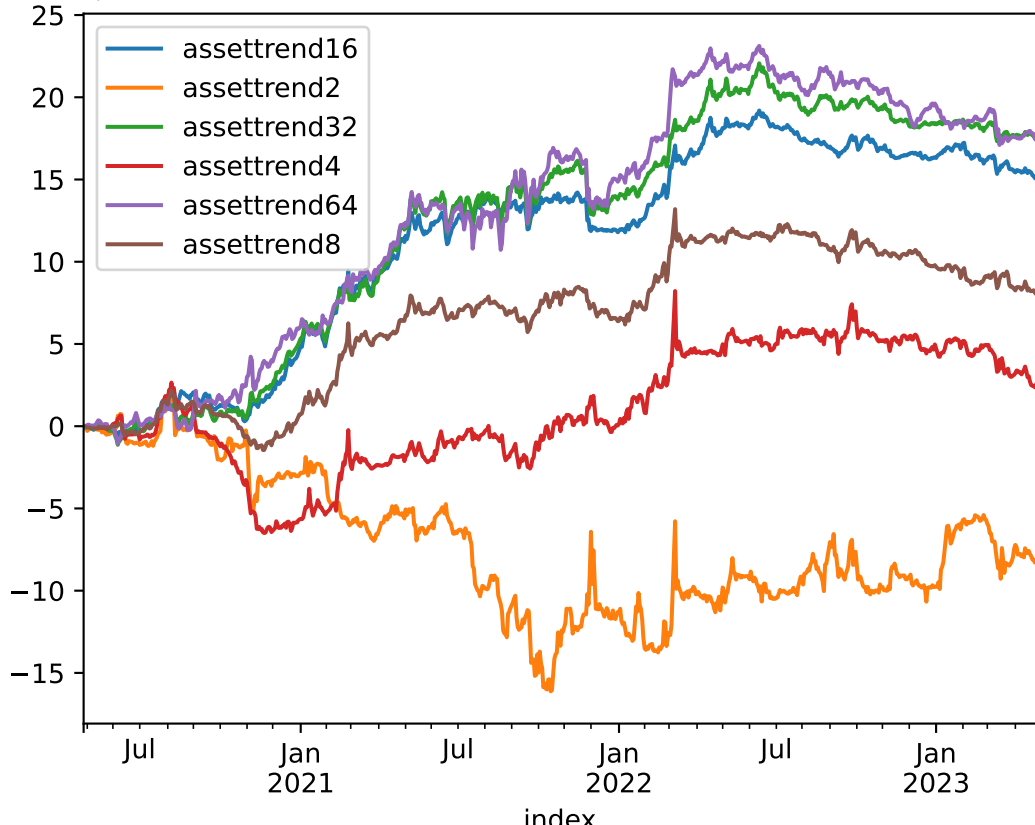


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.924, 'assettrend2': -2.707, 'assettrend32': 5.721, 'assettrend4': 0.829, 'assettrend64': 5.697, 'assettrend8': 2.631}

ann. std {'assettrend16': 3.406, 'assettrend2': 7.797, 'assettrend32': 4.12, 'assettrend4': 4.943, 'assettrend64': 4.996, 'assettrend8': 3.516}

ann. SR {'assettrend16': 1.45, 'assettrend2': -0.35, 'assettrend32': 1.39, 'assettrend4': 0.17, 'assettrend64': 1.14, 'assettrend8': 0.75}

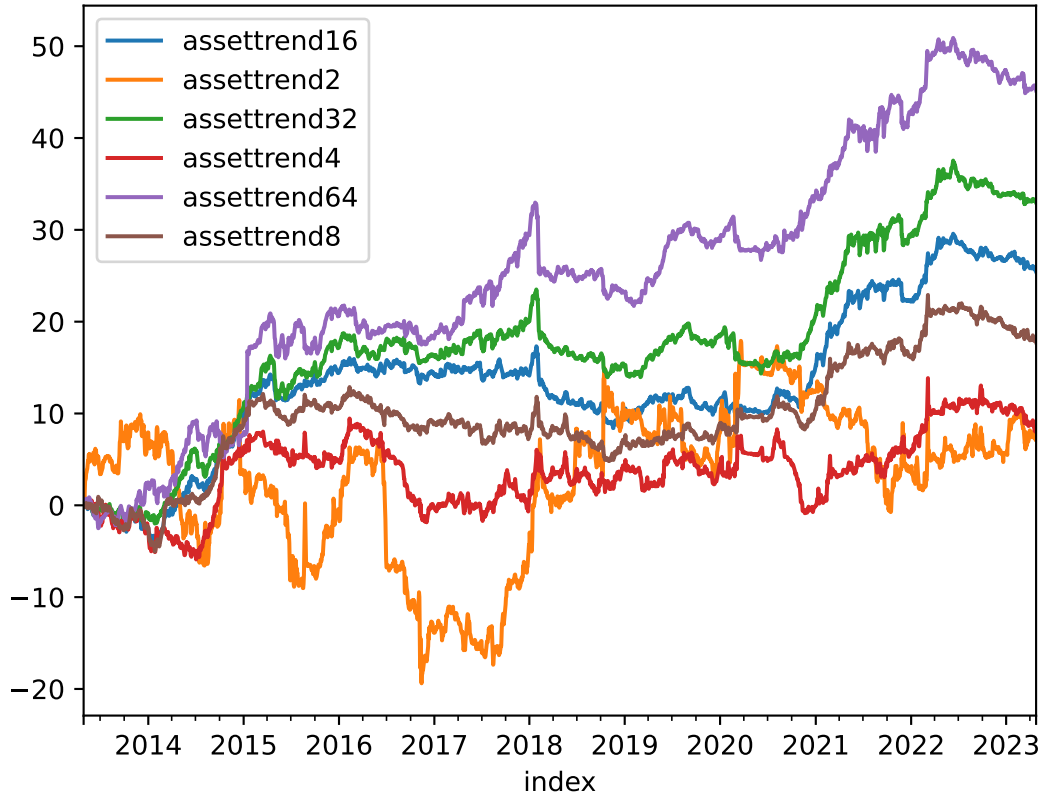


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.496, 'assettrend2': 0.698, 'assettrend32': 3.235, 'assettrend4': 0.802, 'assettrend64': 4.435, 'assettrend8': 1.742}

ann. std {'assettrend16': 3.151, 'assettrend2': 9.782, 'assettrend32': 3.588, 'assettrend4': 4.968, 'assettrend64': 5.189, 'assettrend8': 3.451}

ann. SR {'assettrend16': 0.79, 'assettrend2': 0.07, 'assettrend32': 0.9, 'assettrend4': 0.16, 'assettrend64': 0.85, 'assettrend8': 0.5}

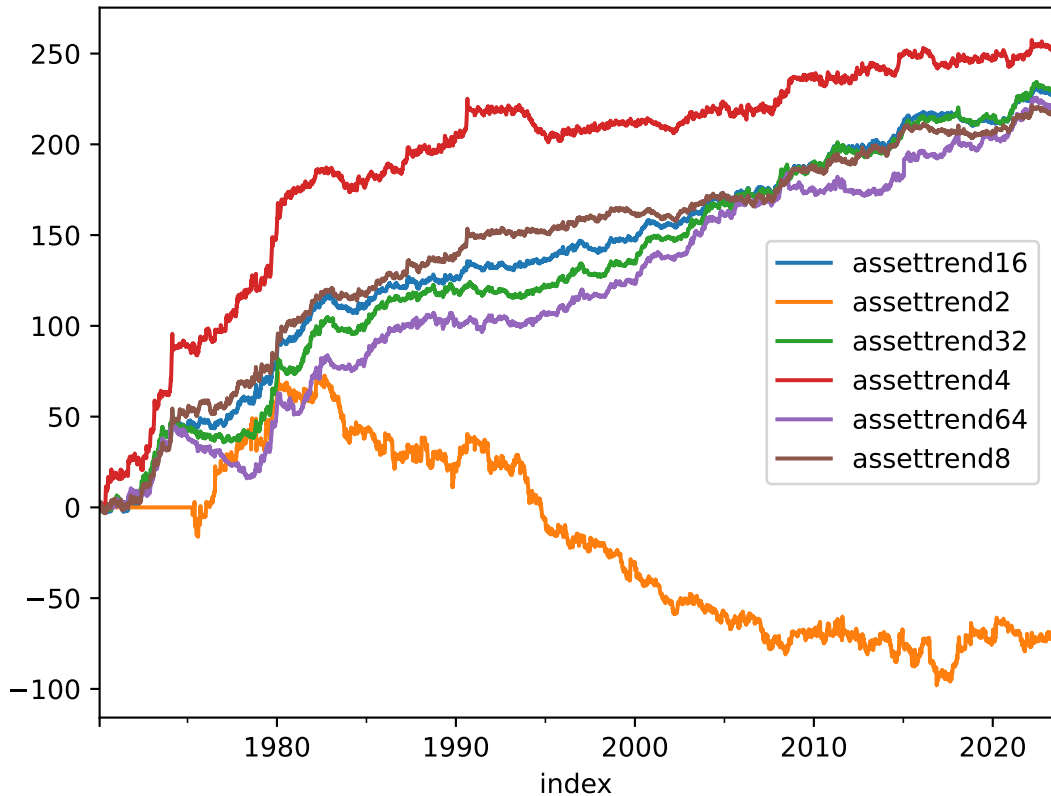


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.187, 'assettrend2': -1.318, 'assettrend32': 4.237, 'assettrend4': 4.643, 'assettrend64': 4.054, 'assettrend8': 3.988}

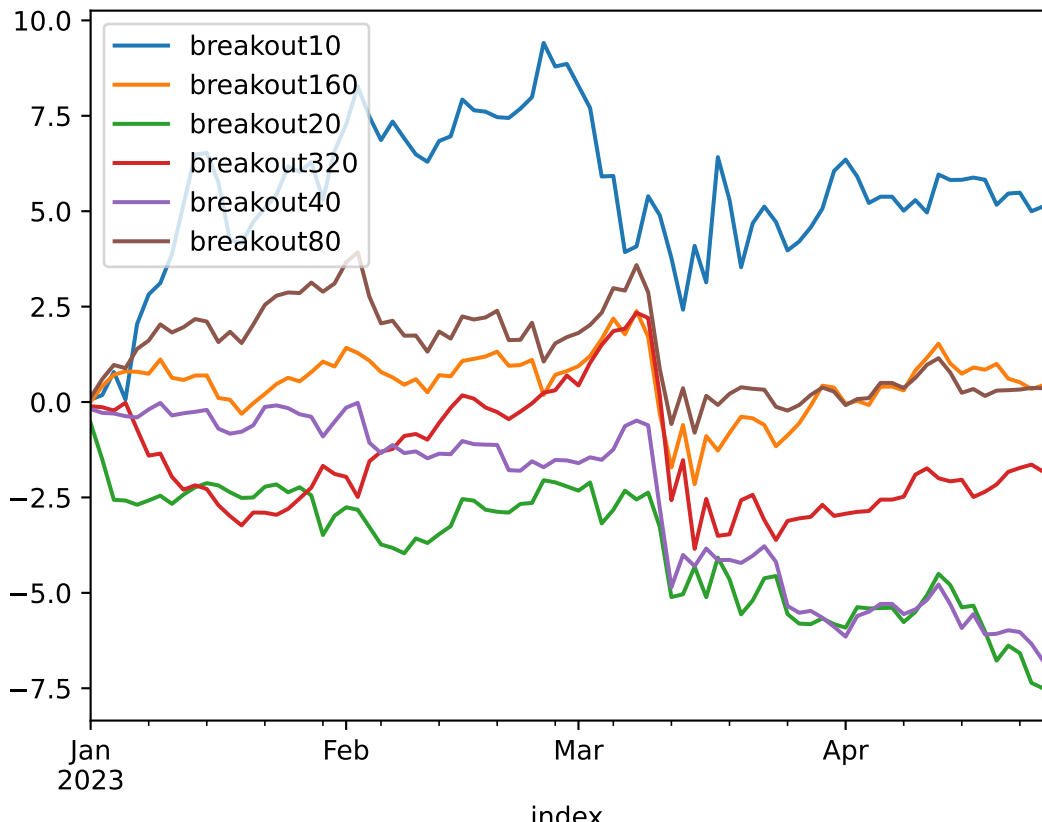
ann. std {'assettrend16': 4.303, 'assettrend2': 10.259, 'assettrend32': 4.494, 'assettrend4': 6.546, 'assettrend64': 4.995, 'assettrend8': 4.633}

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': 15.802, 'breakout160': 1.347, 'breakout20': -23.137, 'breakout320': -5.622, 'breakout40': -20.916, 'breakout80': 1.117}
 ann. std {'breakout10': 13.833, 'breakout160': 7.852, 'breakout20': 7.768, 'breakout320': 9.589, 'breakout40': 7.344, 'breakout80': 7.884}
 ann. SR {'breakout10': 1.14, 'breakout160': 0.17, 'breakout20': -2.98, 'breakout320': -0.59, 'breakout40': -2.85, 'breakout80': 0.14}

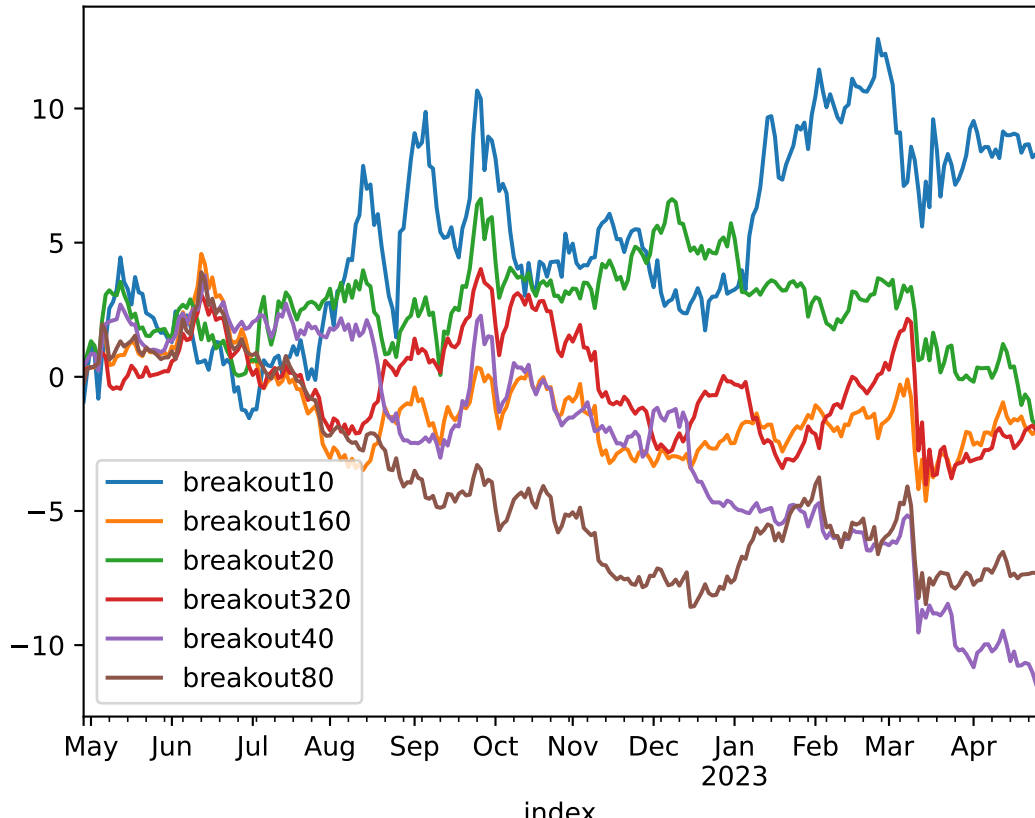


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 8.179, 'breakout160': -2.01, 'breakout20': -1.749, 'breakout320': -1.965, 'breakout40': -11.284, 'breakout80': -7.198}

ann. std {'breakout10': 13.356, 'breakout160': 7.007, 'breakout20': 8.619, 'breakout320': 7.518, 'breakout40': 7.232, 'breakout80': 6.724}

ann. SR {'breakout10': 0.61, 'breakout160': -0.29, 'breakout20': -0.2, 'breakout320': -0.26, 'breakout40': -1.56, 'breakout80': -1.07}

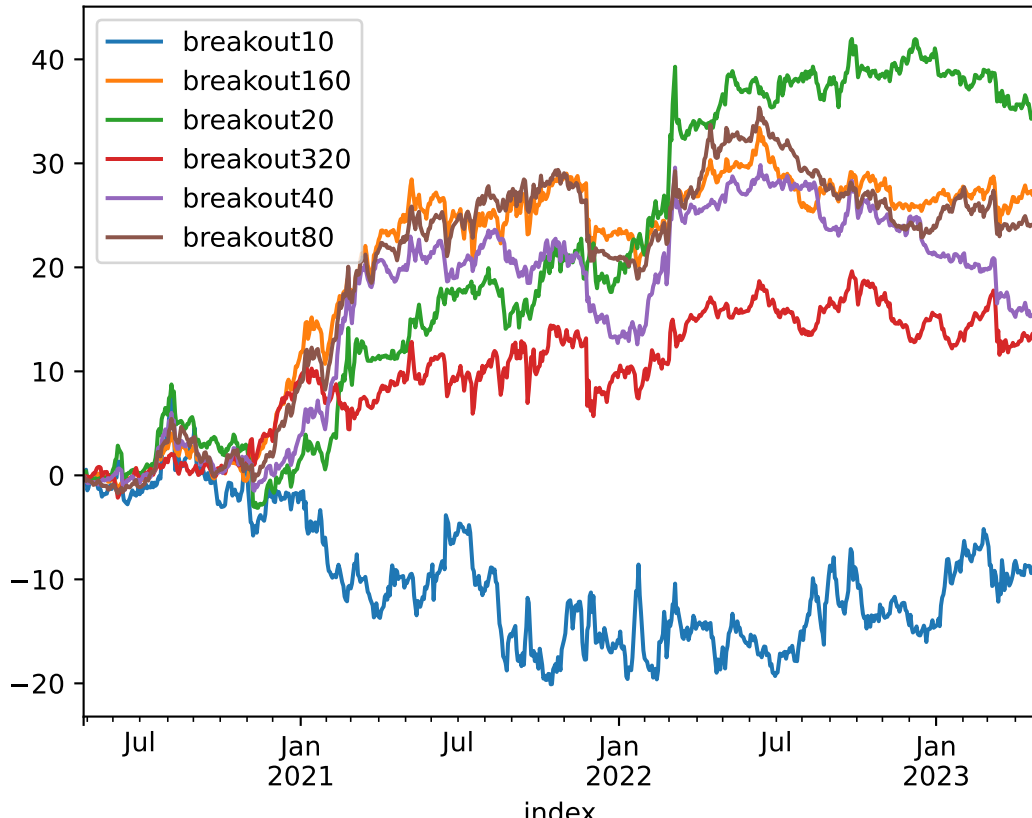


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.093, 'breakout160': 8.769, 'breakout20': 10.985, 'breakout320': 4.456, 'breakout40': 4.779, 'breakout80': 7.905}

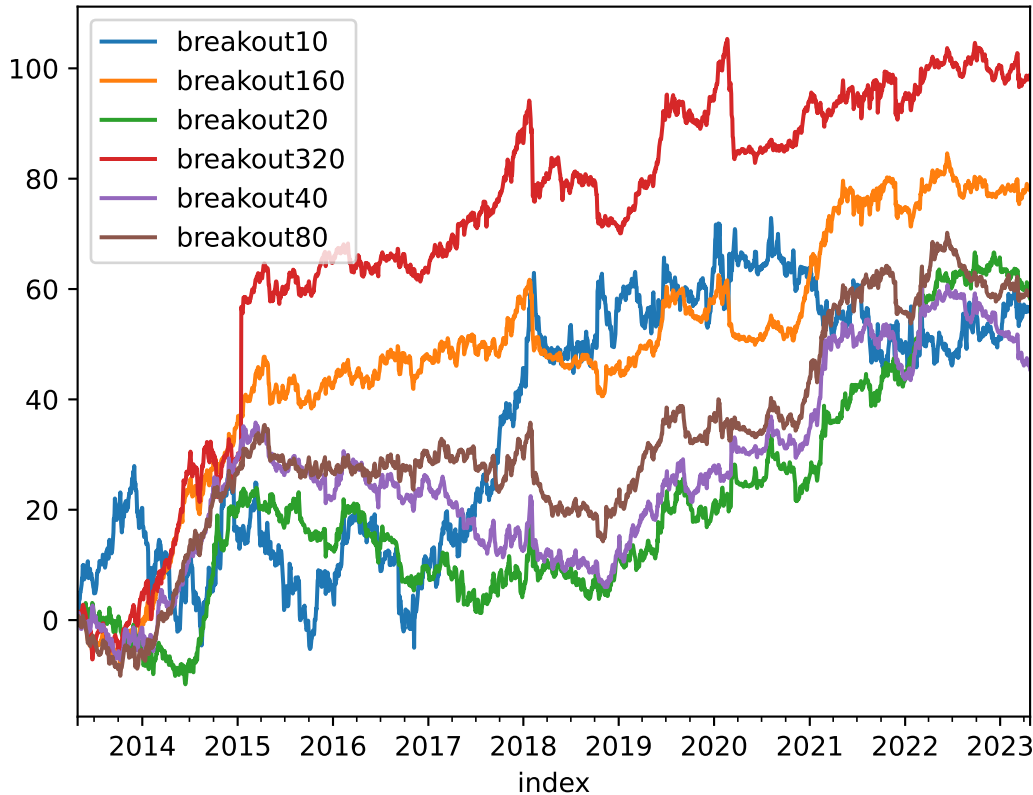
ann. std {'breakout10': 15.053, 'breakout160': 9.173, 'breakout20': 11.048, 'breakout320': 9.894, 'breakout40': 9.474, 'breakout80': 8.901}

ann. SR {'breakout10': -0.21, 'breakout160': 0.96, 'breakout20': 0.99, 'breakout320': 0.45, 'breakout40': 0.5, 'breakout80': 0.89}



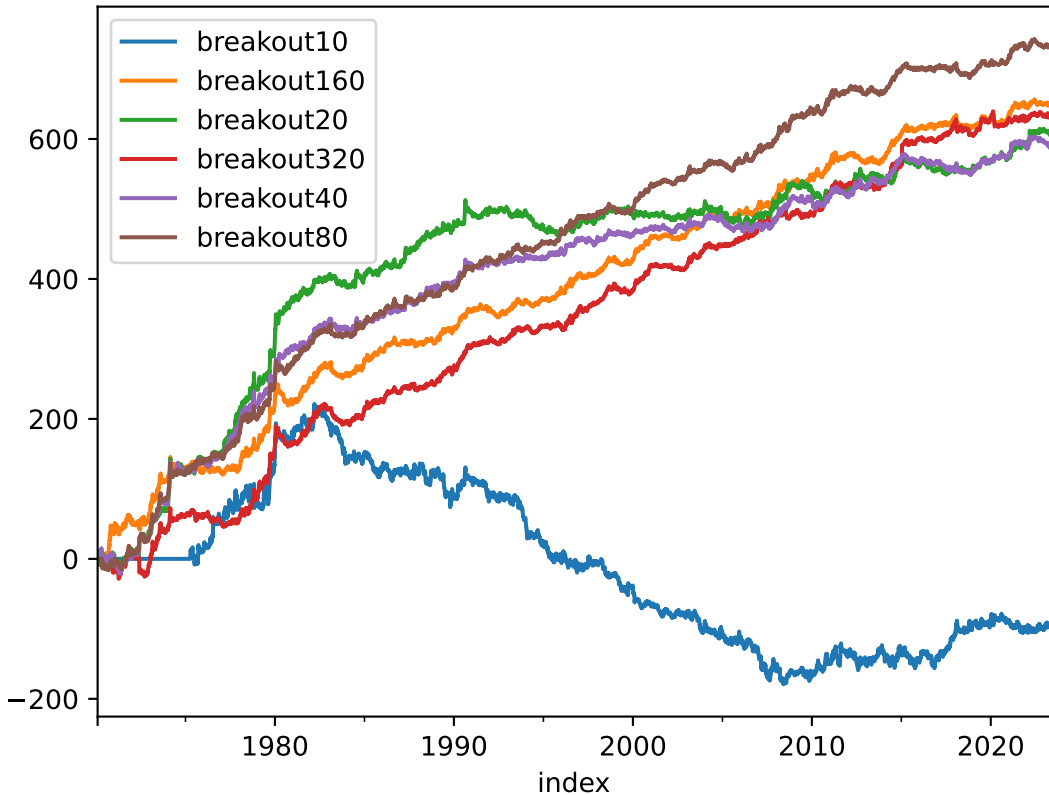
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 5.495, 'breakout160': 7.654, 'breakout20': 5.717, 'breakout320': 9.68, 'breakout40': 4.465, 'breakout80': 5.791}
ann. std {'breakout10': 17.808, 'breakout160': 8.871, 'breakout20': 11.086, 'breakout320': 13.083, 'breakout40': 9.39, 'breakout80': 8.73}
ann. SR {'breakout10': 0.31, 'breakout160': 0.86, 'breakout20': 0.52, 'breakout320': 0.74, 'breakout40': 0.48, 'breakout80': 0.66}



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

ann. mean {'breakout10': -1.755, 'breakout160': 11.985, 'breakout20': 11.175, 'breakout320': 11.665, 'breakout40': 10.842, 'breakout80': 13.49}
ann. std {'breakout10': 21.318, 'breakout160': 11.528, 'breakout20': 14.89, 'breakout320': 12.114, 'breakout40': 12.111, 'breakout80': 11.717}
ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

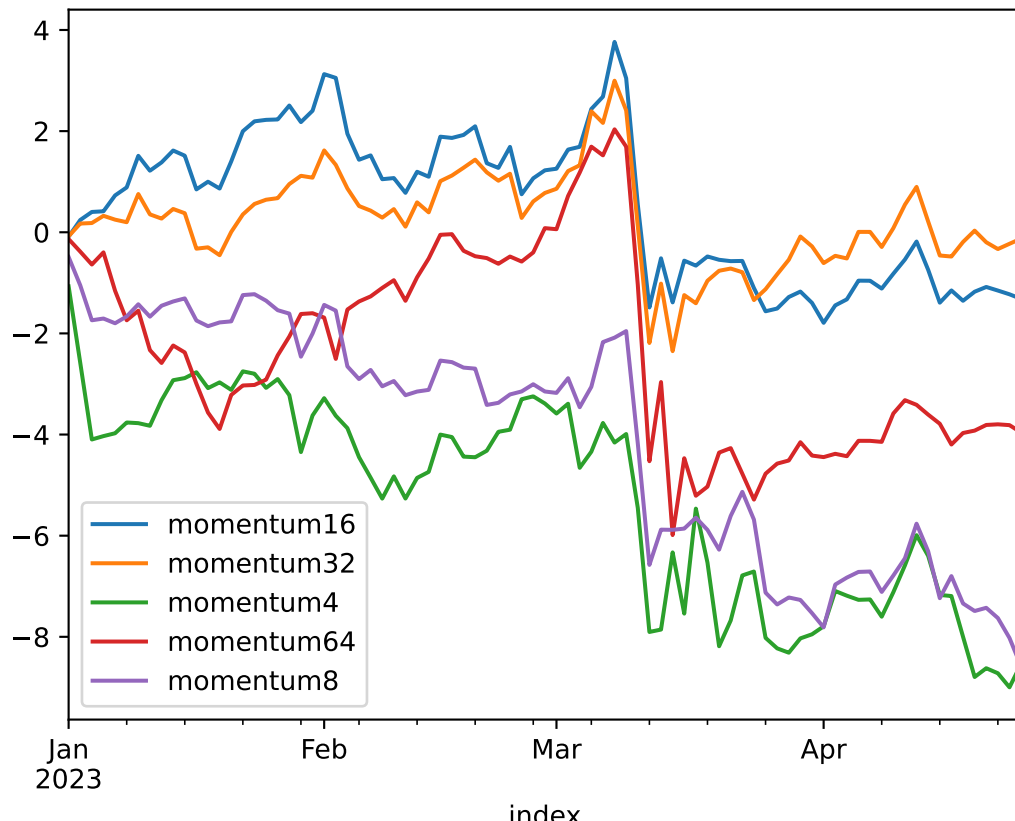


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -4.062, 'momentum32': -0.388, 'momentum4': -26.324, 'momentum64': -26.473}

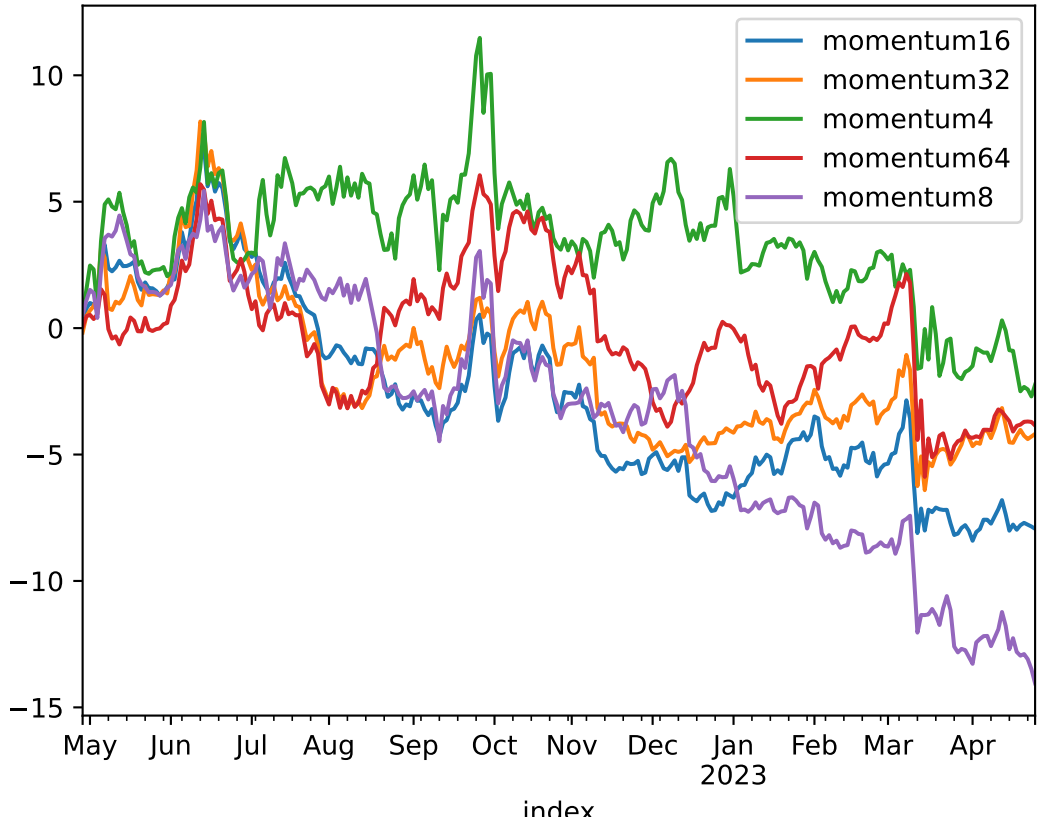
ann. std {'momentum16': 8.767, 'momentum32': 8.789, 'momentum4': 11.121, 'momentum64': 11.762, 'momentum8': 8.746}

ann. SR {'momentum16': -0.46, 'momentum32': -0.04, 'momentum4': -2.37, 'momentum64': -1.04, 'momentum8': -3.03}



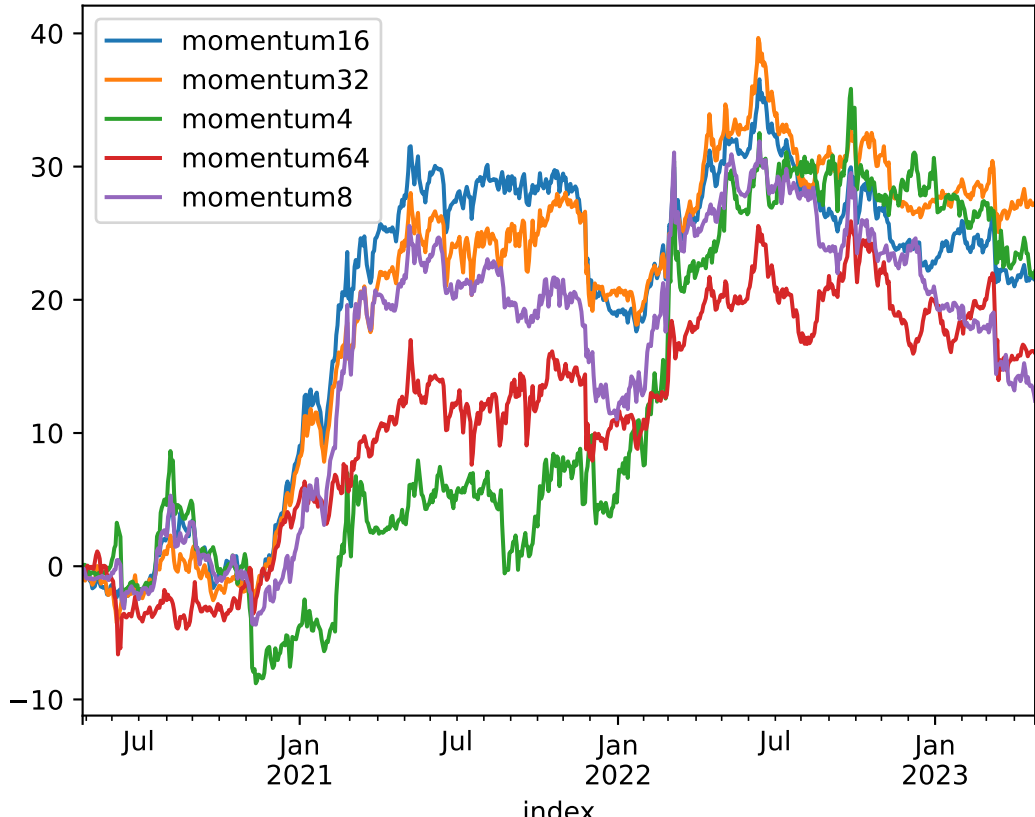
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -7.815, 'momentum32': -4.119, 'momentum4': -2.204, 'momentum64': -3.794, 'momentum8': -13.832}
ann. std {'momentum16': 8.79, 'momentum32': 9.235, 'momentum4': 13.53, 'momentum64': 10.231, 'momentum8': 10.034}
ann. SR {'momentum16': -0.89, 'momentum32': -0.45, 'momentum4': -0.16, 'momentum64': -0.37, 'momentum8': -1.38}



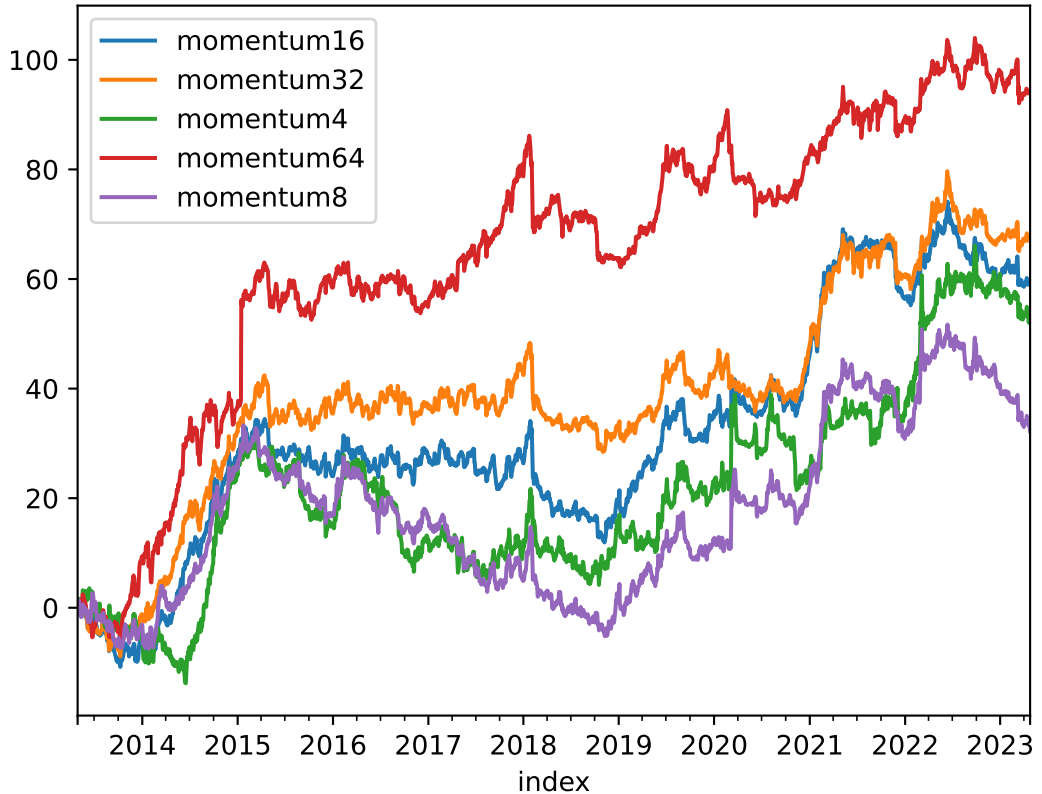
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.032, 'momentum32': 8.939, 'momentum4': 7.242, 'momentum64': 5.237, 'momentum8': 4.067}
ann. std {'momentum16': 10.124, 'momentum32': 10.386, 'momentum4': 14.63, 'momentum64': 10.819, 'momentum8': 11.414}
ann. SR {'momentum16': 0.69, 'momentum32': 0.86, 'momentum4': 0.5, 'momentum64': 0.48, 'momentum8': 0.36}



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

ann. mean {'momentum16': 5.796, 'momentum32': 6.609, 'momentum4': 5.142, 'momentum64': 9.237, 'momentum8': 3.162}
ann. std {'momentum16': 9.662, 'momentum32': 9.274, 'momentum4': 13.677, 'momentum64': 11.869, 'momentum8': 10.868}
ann. SR {'momentum16': 0.6, 'momentum32': 0.71, 'momentum4': 0.38, 'momentum64': 0.78, 'momentum8': 0.29}

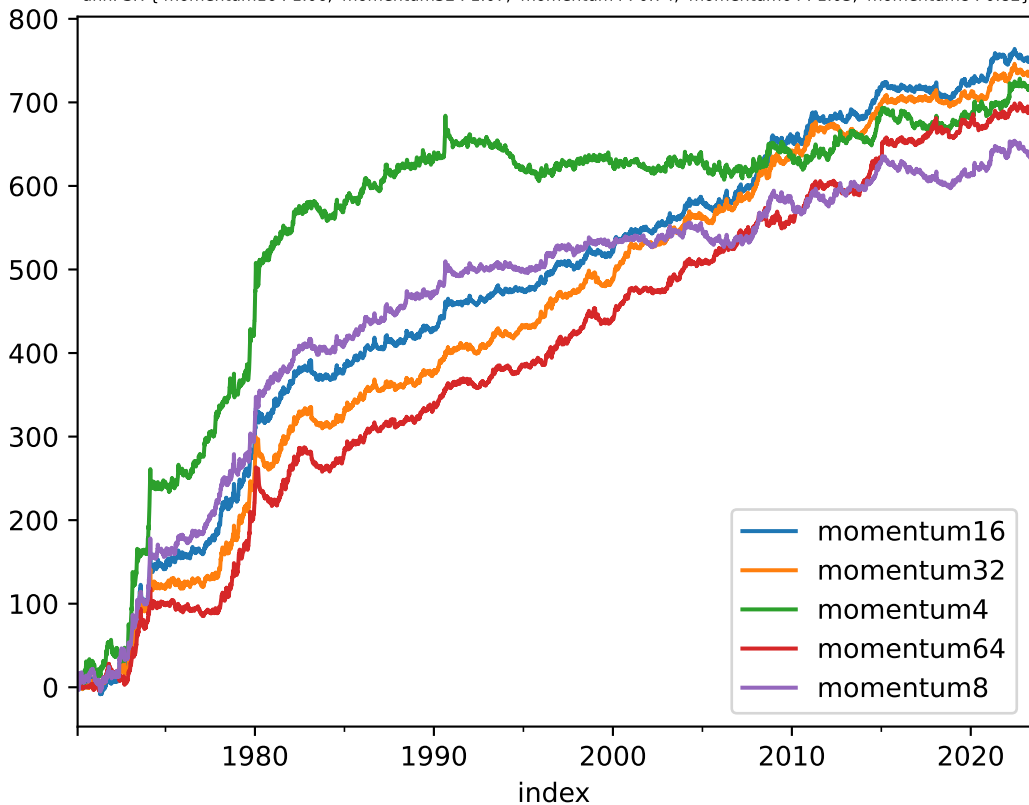


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.806, 'momentum32': 13.528, 'momentum4': 13.175, 'momentum64': 12.705, 'momentum8': 11.7}

ann. std {'momentum16': 13.046, 'momentum32': 12.609, 'momentum4': 17.892, 'momentum64': 12.33, 'momentum8': 14.331}

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

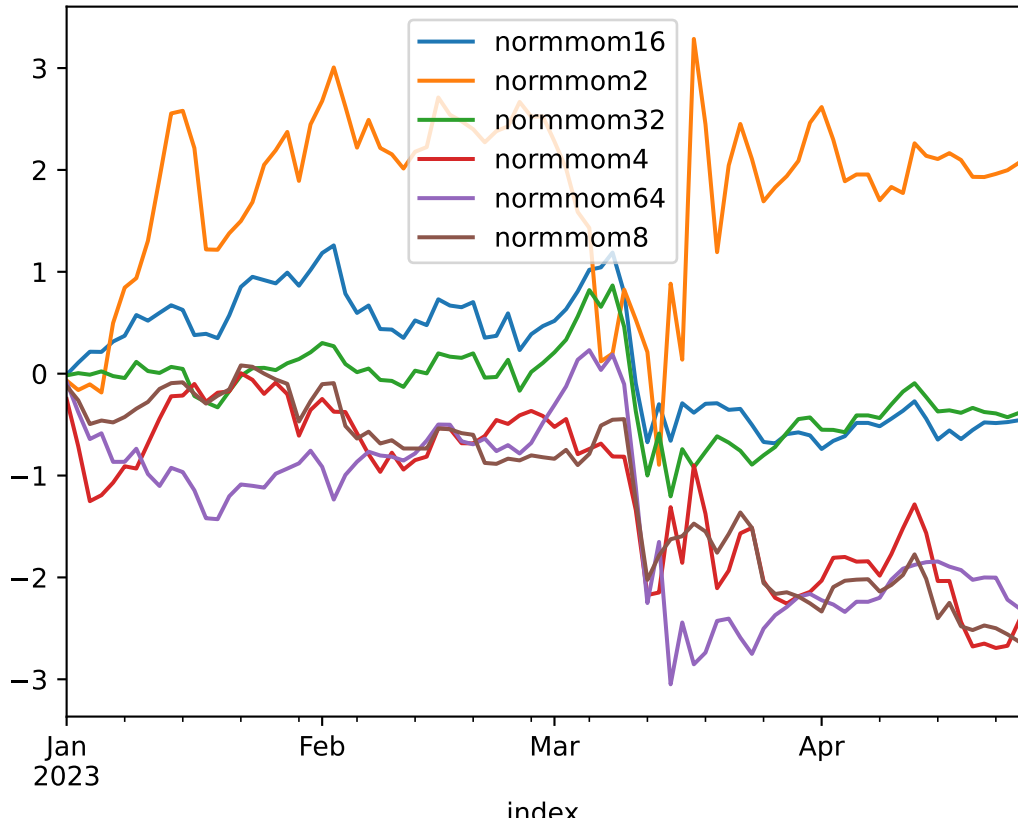


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.409, 'normmom2': 6.389, 'normmom32': -1.187, 'normmom4': -7.486, 'normmom64': -7.099, 'normmom8': -8.115}

ann. std {'normmom16': 3.155, 'normmom2': 9.061, 'normmom32': 3.088, 'normmom4': 4.519, 'normmom64': 4.587, 'normmom8': 3.084}

ann. SR {'normmom16': -0.45, 'normmom2': 0.71, 'normmom32': -0.38, 'normmom4': -1.66, 'normmom64': -1.55, 'normmom8': -2.63}

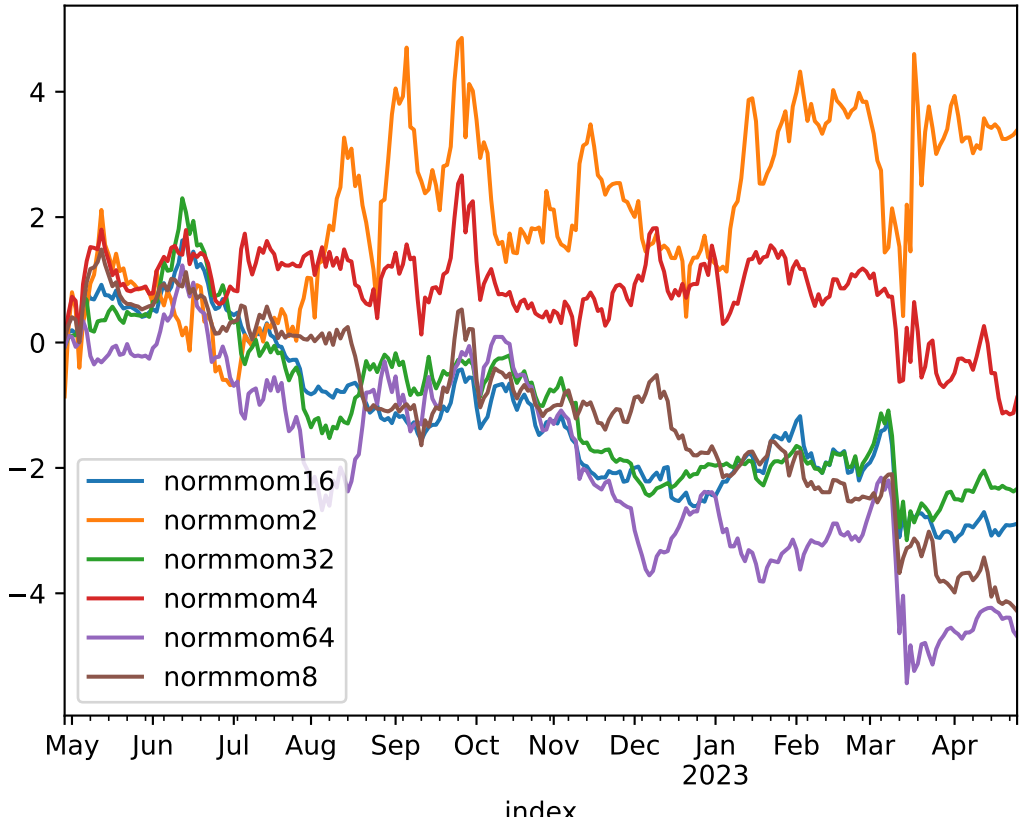


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.846, 'normmom2': 3.335, 'normmom32': -2.298, 'normmom4': -0.867, 'normmom64': -4.616, 'normmom8': -4.219}

ann. std {'normmom16': 2.613, 'normmom2': 7.638, 'normmom32': 2.901, 'normmom4': 4.381, 'normmom64': 3.817, 'normmom8': 2.986}

ann. SR {'normmom16': -1.09, 'normmom2': 0.44, 'normmom32': -0.79, 'normmom4': -0.2, 'normmom64': -1.21, 'normmom8': -1.41}

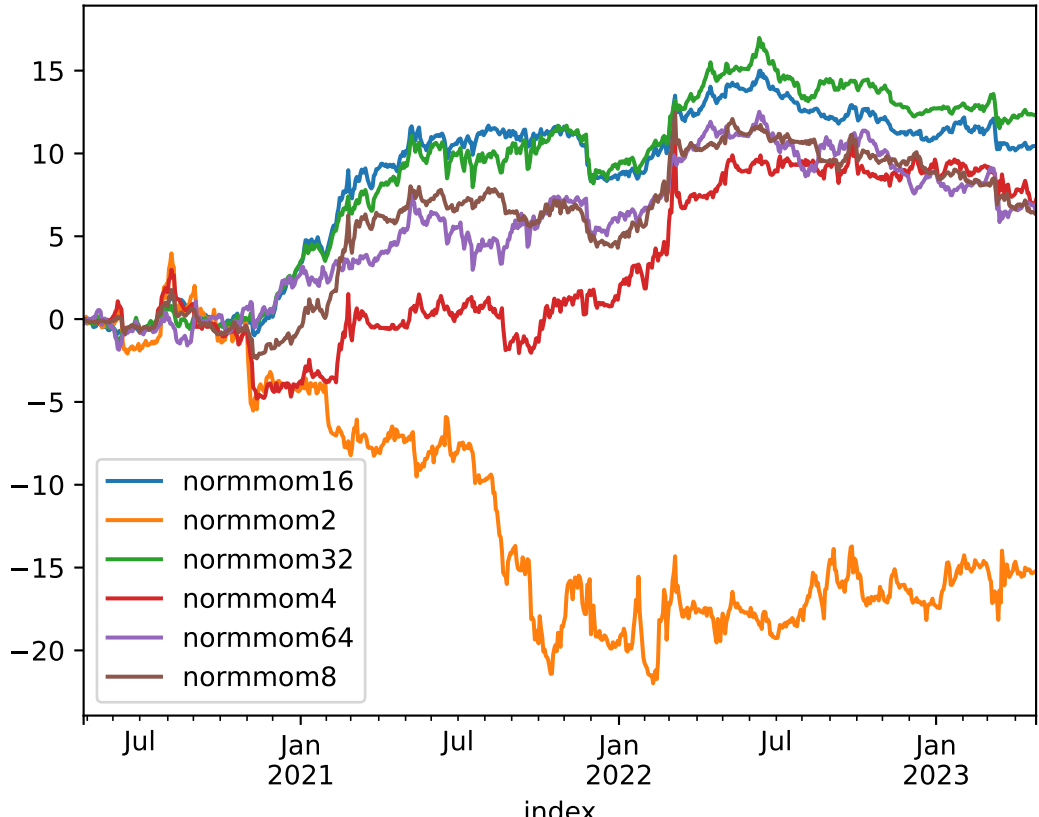


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.425, 'normmom2': -4.973, 'normmom32': 4.04, 'normmom4': 2.36, 'normmom64': 2.161, 'normmom8': 2.067}

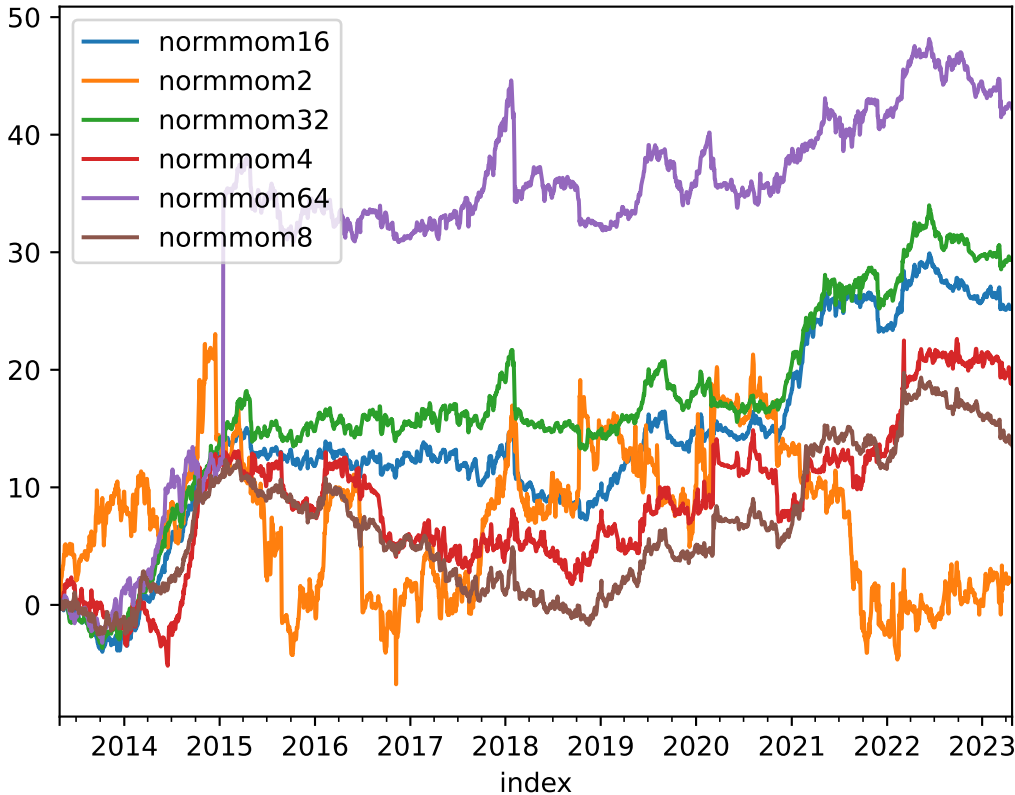
ann. std {'normmom16': 3.507, 'normmom2': 8.614, 'normmom32': 3.877, 'normmom4': 5.37, 'normmom64': 4.274, 'normmom8': 3.927}

ann. SR {'normmom16': 0.98, 'normmom2': -0.58, 'normmom32': 1.04, 'normmom4': 0.44, 'normmom64': 0.51, 'normmom8': 0.53}



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

ann. mean {'normmom16': 2.49, 'normmom2': 0.21, 'normmom32': 2.882, 'normmom4': 1.873, 'normmom64': 4.145, 'normmom8': 1.332}
ann. std {'normmom16': 3.465, 'normmom2': 10.318, 'normmom32': 3.622, 'normmom4': 5.442, 'normmom64': 8.271, 'normmom8': 3.882}
ann. SR {'normmom16': 0.72, 'normmom2': 0.02, 'normmom32': 0.8, 'normmom4': 0.34, 'normmom64': 0.5, 'normmom8': 0.34}

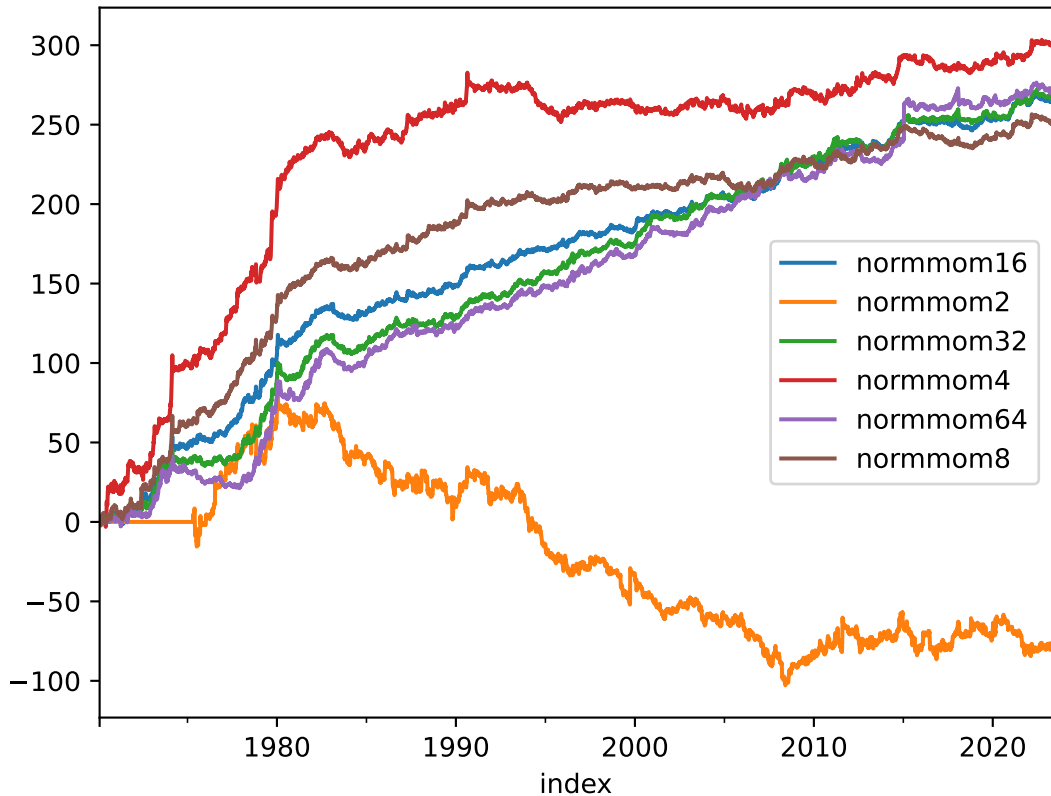


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.877, 'normmom2': -1.429, 'normmom32': 4.927, 'normmom4': 5.526, 'normmom64': 4.988, 'normmom8': 4.616}

ann. std {'normmom16': 4.532, 'normmom2': 11.61, 'normmom32': 4.609, 'normmom4': 7.384, 'normmom64': 5.87, 'normmom8': 5.365}

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

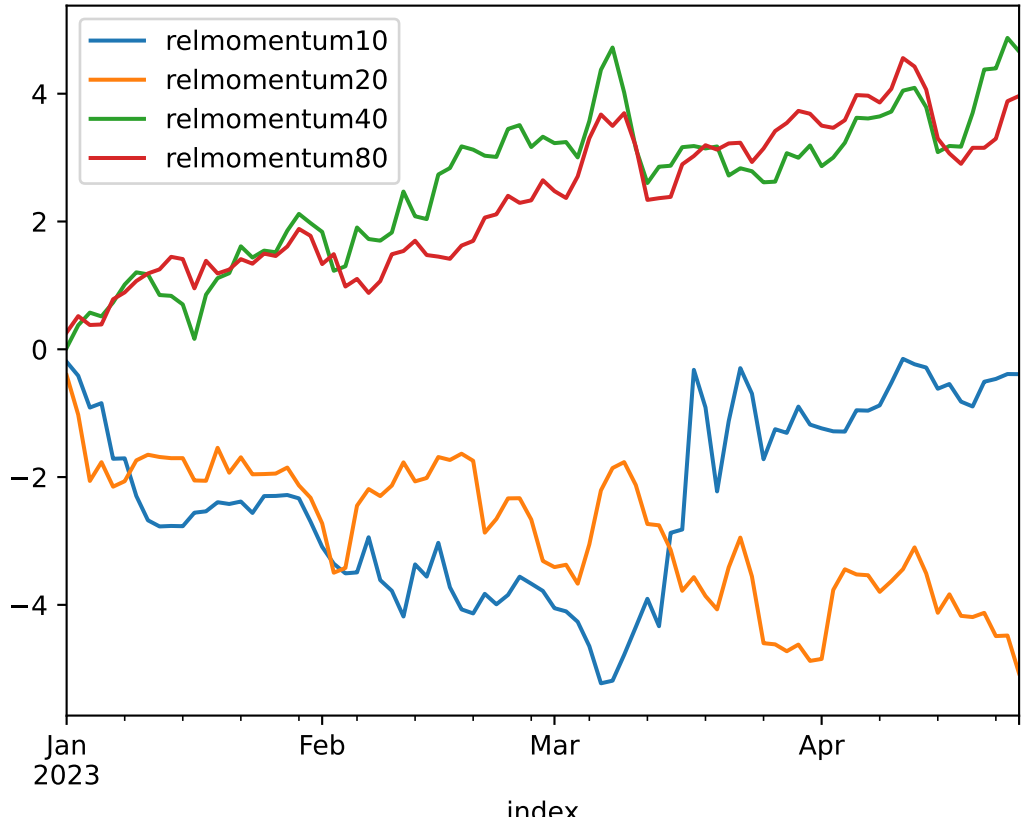


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.201, 'relmomentum20': -15.648, 'relmomentum40': 14.38, 'relmomentum80': 12.229}

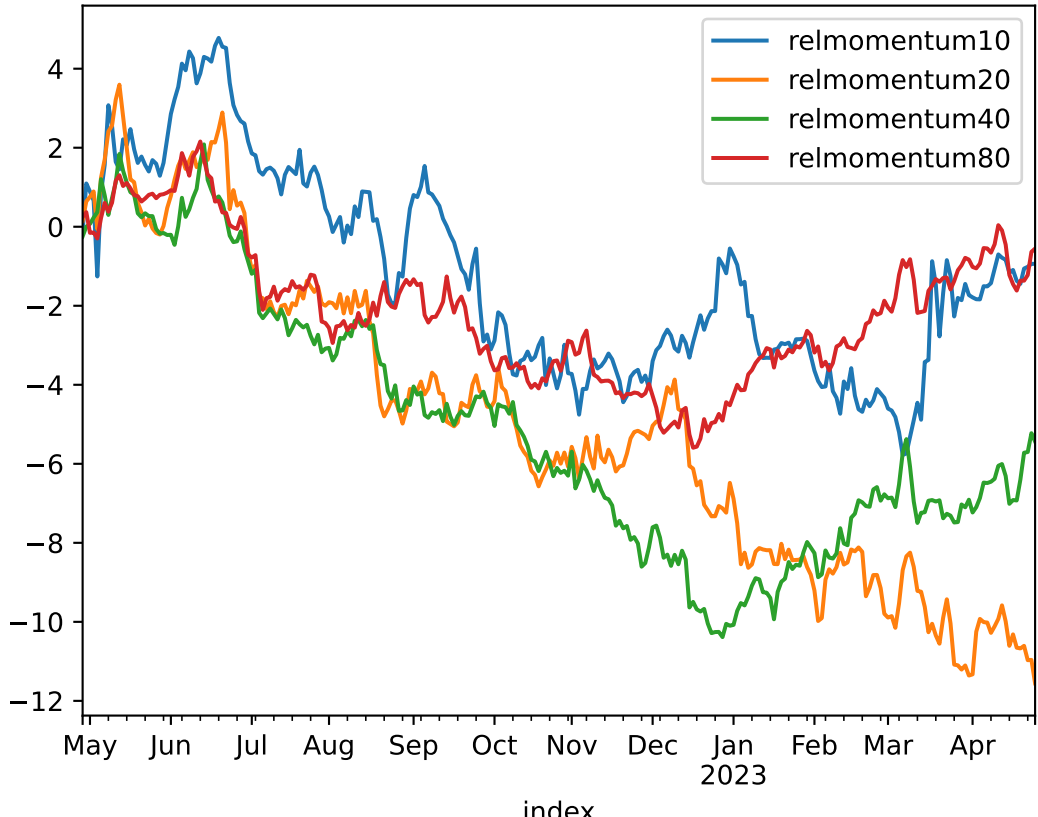
ann. std {'relmomentum10': 8.105, 'relmomentum20': 6.634, 'relmomentum40': 5.362, 'relmomentum80': 4.349}

ann. SR {'relmomentum10': -0.15, 'relmomentum20': -2.36, 'relmomentum40': 2.68, 'relmomentum80': 2.81}



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

ann. mean {'relmomentum10': -0.925, 'relmomentum20': -11.378, 'relmomentum40': -5.353, 'relmomentum80': -0.545}
ann. std {'relmomentum10': 8.025, 'relmomentum20': 6.647, 'relmomentum40': 5.334, 'relmomentum80': 4.55}
ann. SR {'relmomentum10': -0.12, 'relmomentum20': -1.71, 'relmomentum40': -1.0, 'relmomentum80': -0.12}

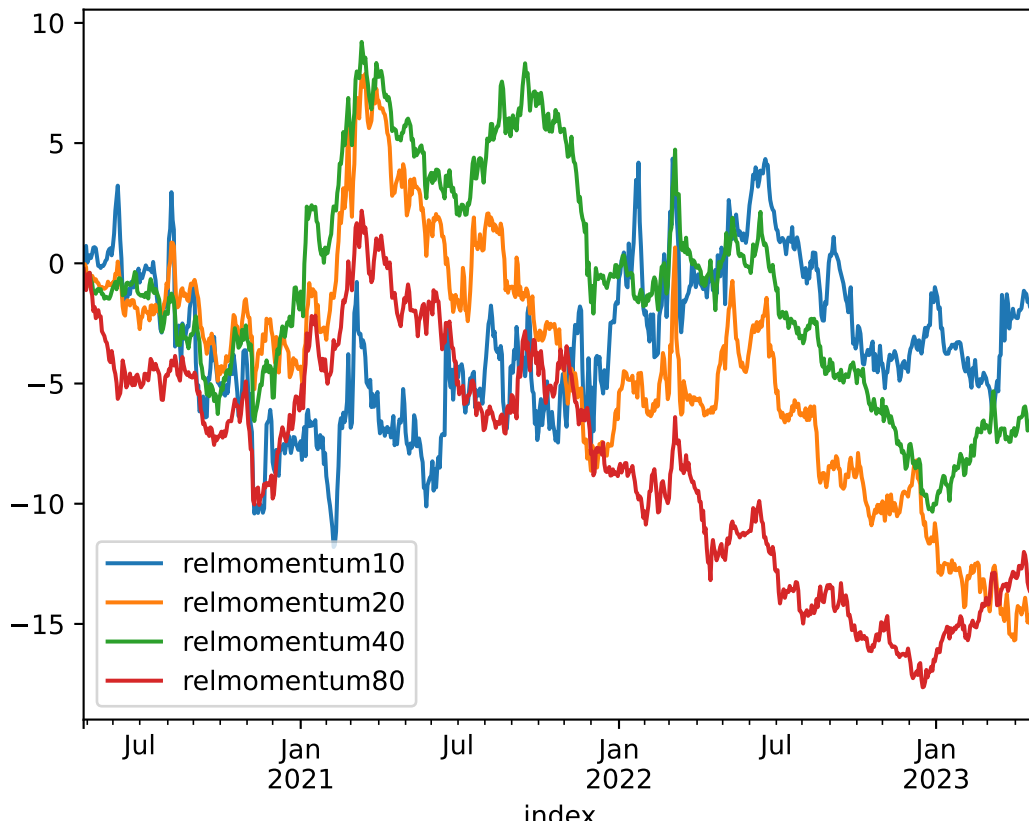


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.452, 'relmomentum20': -5.2, 'relmomentum40': -1.762, 'relmomentum80': -4.124}

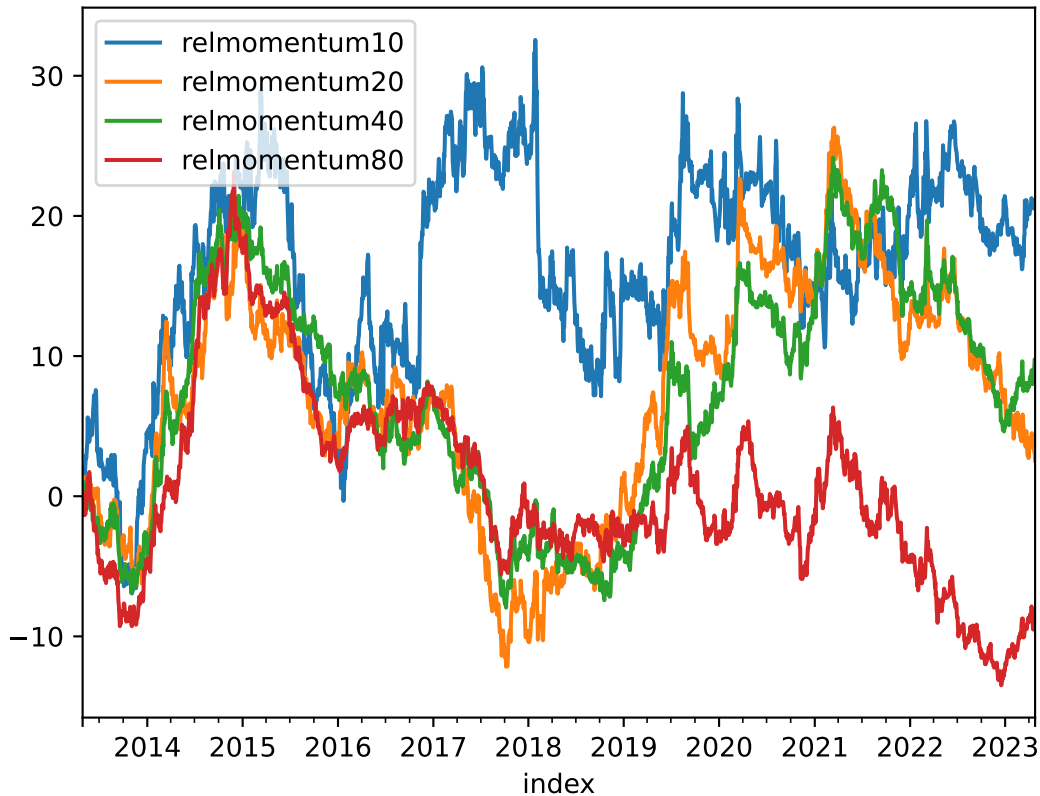
ann. std {'relmomentum10': 11.914, 'relmomentum20': 8.345, 'relmomentum40': 6.951, 'relmomentum80': 6.344}

ann. SR {'relmomentum10': -0.04, 'relmomentum20': -0.62, 'relmomentum40': -0.25, 'relmomentum80': -0.65}

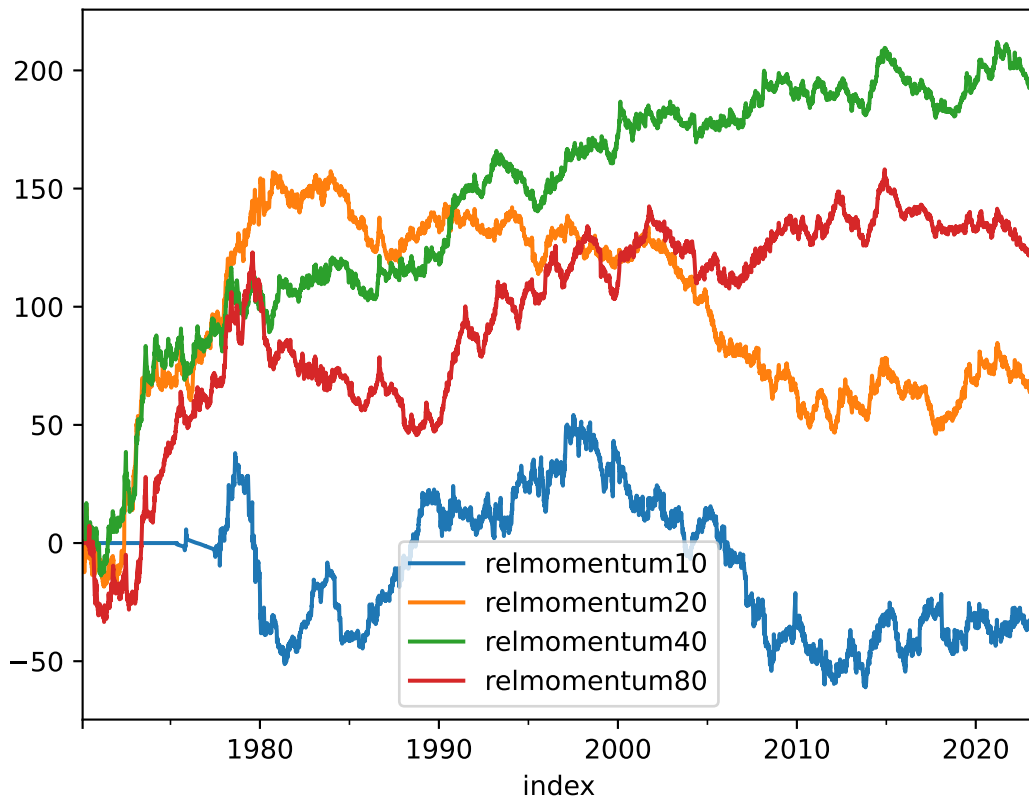


Total Trading Rule P&L for period '10Y'

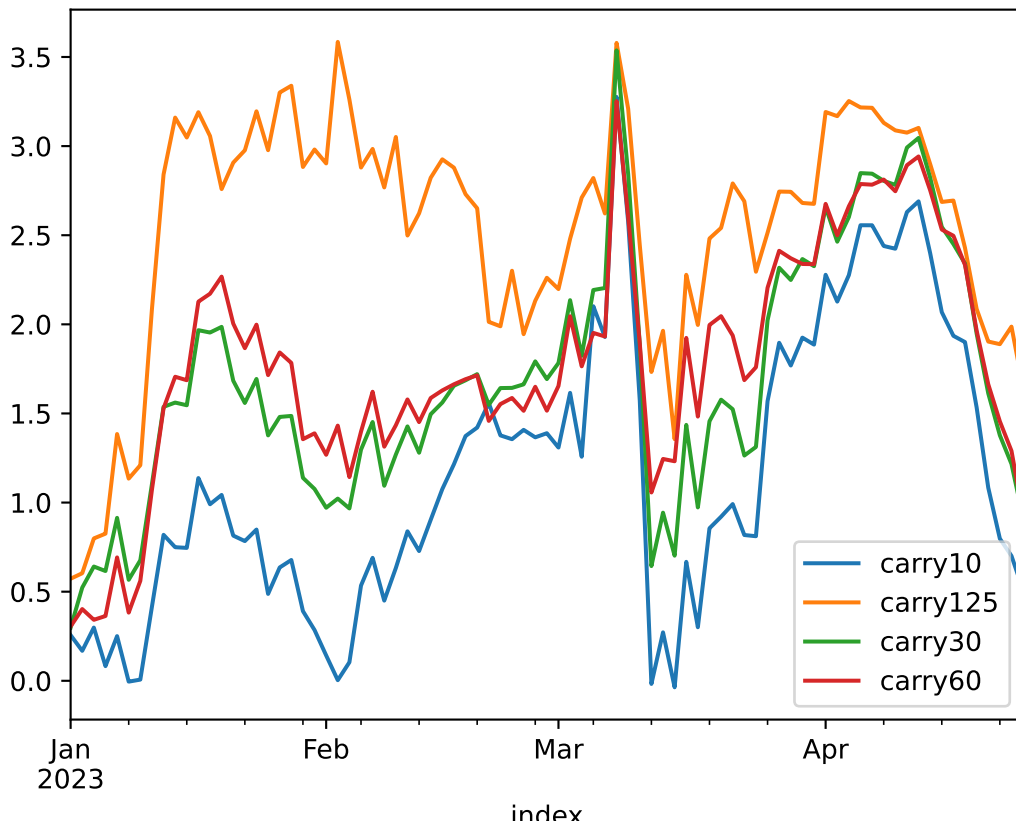
ann. mean {'relmomentum10': 2.064, 'relmomentum20': 0.248, 'relmomentum40': 0.939, 'relmomentum80': -0.83}
ann. std {'relmomentum10': 13.408, 'relmomentum20': 8.571, 'relmomentum40': 7.008, 'relmomentum80': 6.387}
ann. SR {'relmomentum10': 0.15, 'relmomentum20': 0.03, 'relmomentum40': 0.13, 'relmomentum80': -0.13}



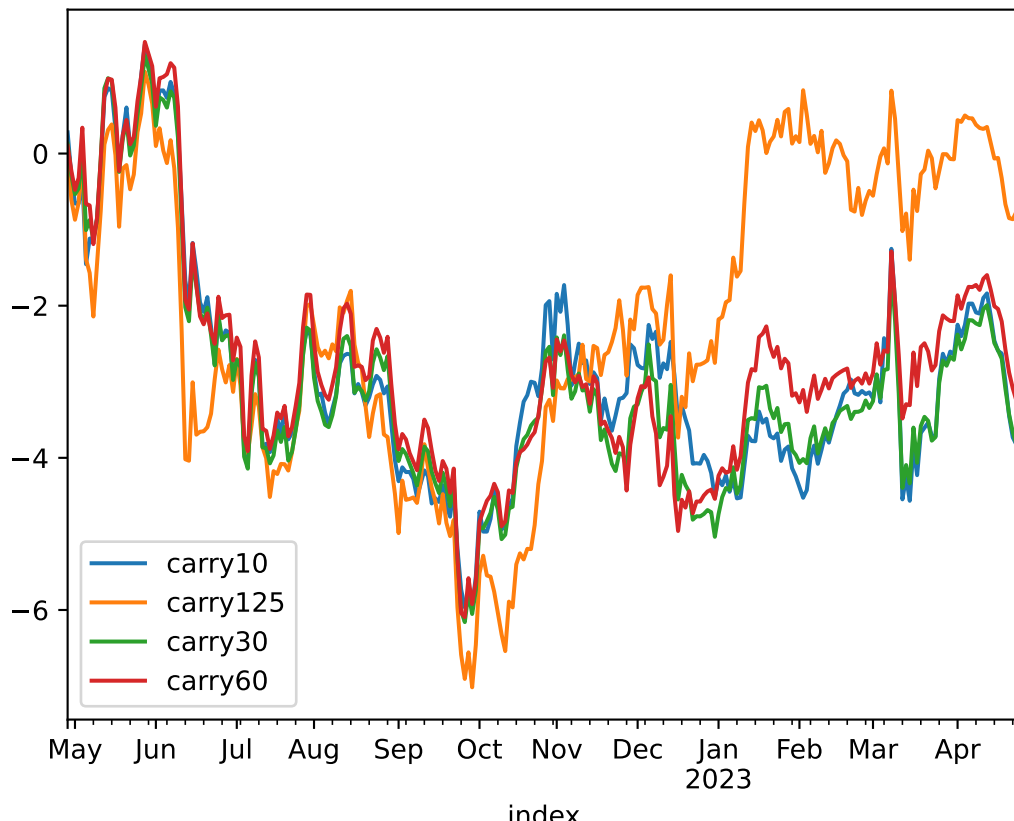
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.61, 'relmomentum20': 1.123, 'relmomentum40': 3.64, 'relmomentum80': 2.336}
ann. std {'relmomentum10': 13.389, 'relmomentum20': 10.468, 'relmomentum40': 9.638, 'relmomentum80': 9.783}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 1.569, 'carry125': 5.074, 'carry30': 2.821, 'carry60': 2.871}
ann. std {'carry10': 5.945, 'carry125': 5.492, 'carry30': 5.458, 'carry60': 4.892}
ann. SR {'carry10': 0.26, 'carry125': 0.92, 'carry30': 0.52, 'carry60': 0.59}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.958, 'carry125': -1.09, 'carry30': -4.06, 'carry60': -3.553}
ann. std {'carry10': 6.084, 'carry125': 6.699, 'carry30': 6.048, 'carry60': 5.999}
ann. SR {'carry10': -0.65, 'carry125': -0.16, 'carry30': -0.67, 'carry60': -0.59}

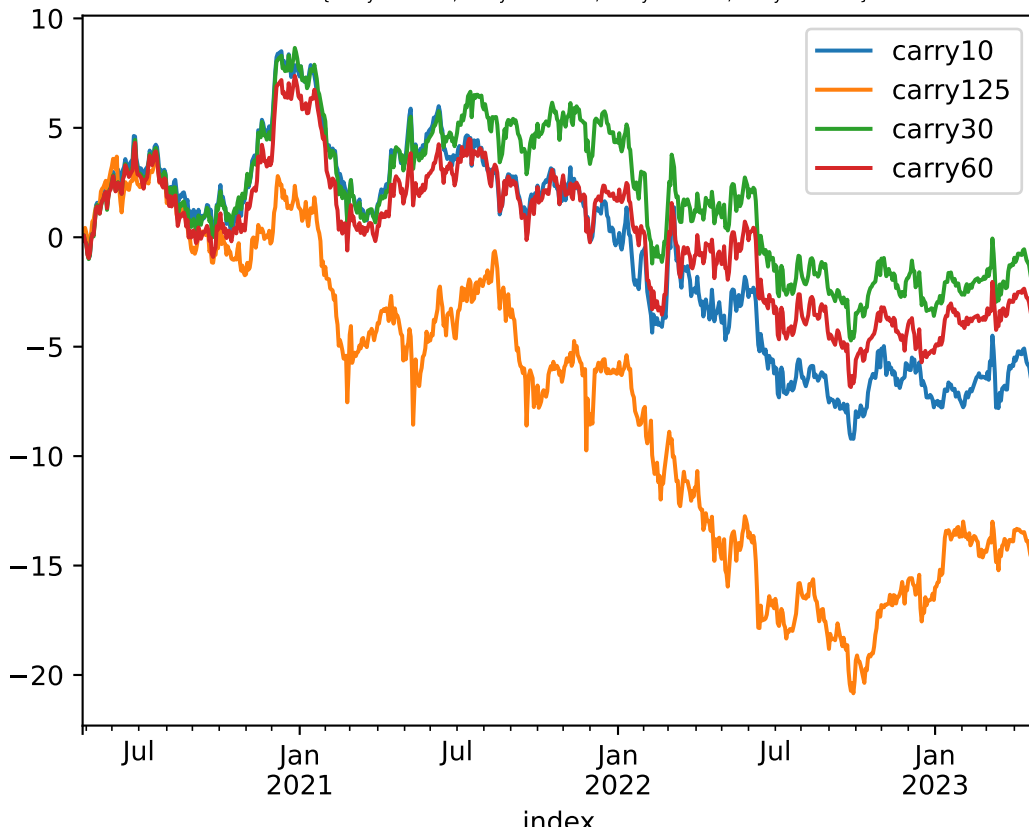


Total Trading Rule P&L for period '3Y'

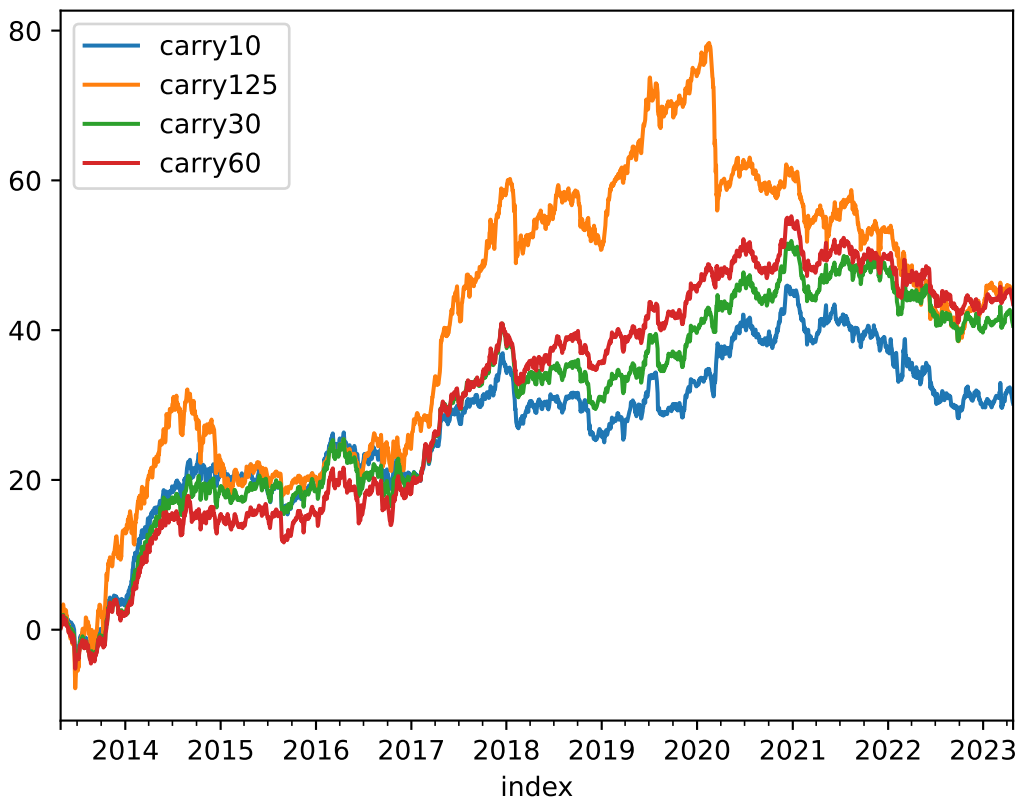
ann. mean {'carry10': -2.377, 'carry125': -4.887, 'carry30': -0.877, 'carry60': -1.427}

ann. std {'carry10': 6.551, 'carry125': 7.991, 'carry30': 6.479, 'carry60': 6.464}

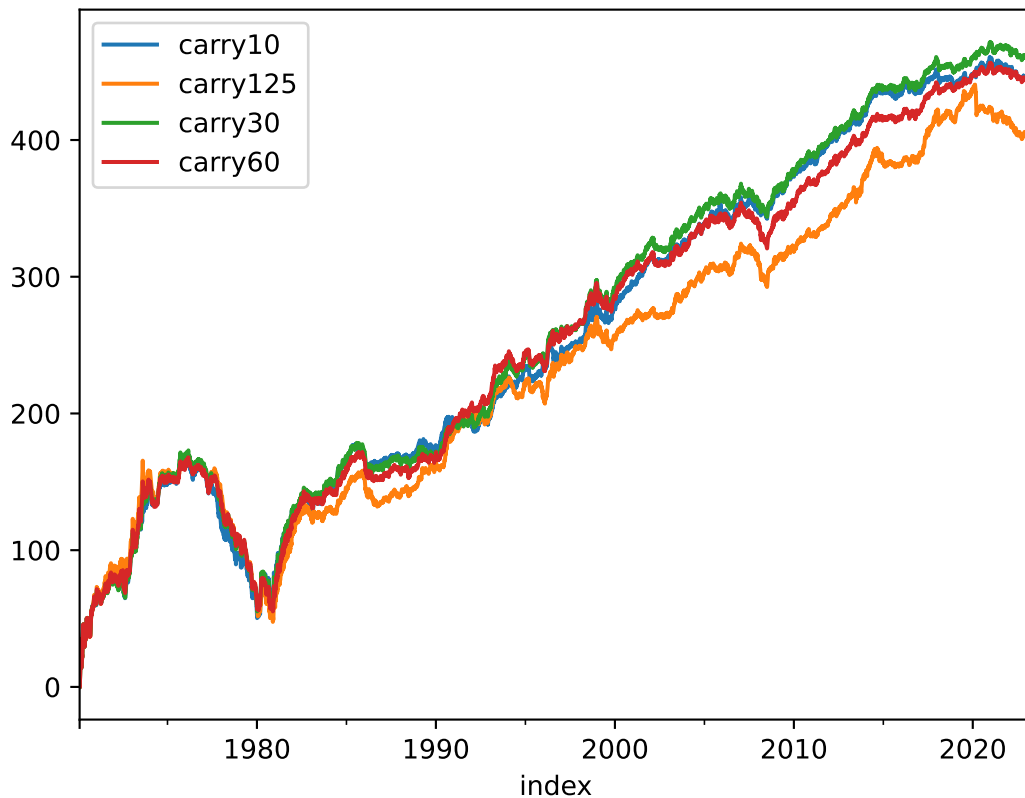
ann. SR {'carry10': -0.36, 'carry125': -0.61, 'carry30': -0.14, 'carry60': -0.22}



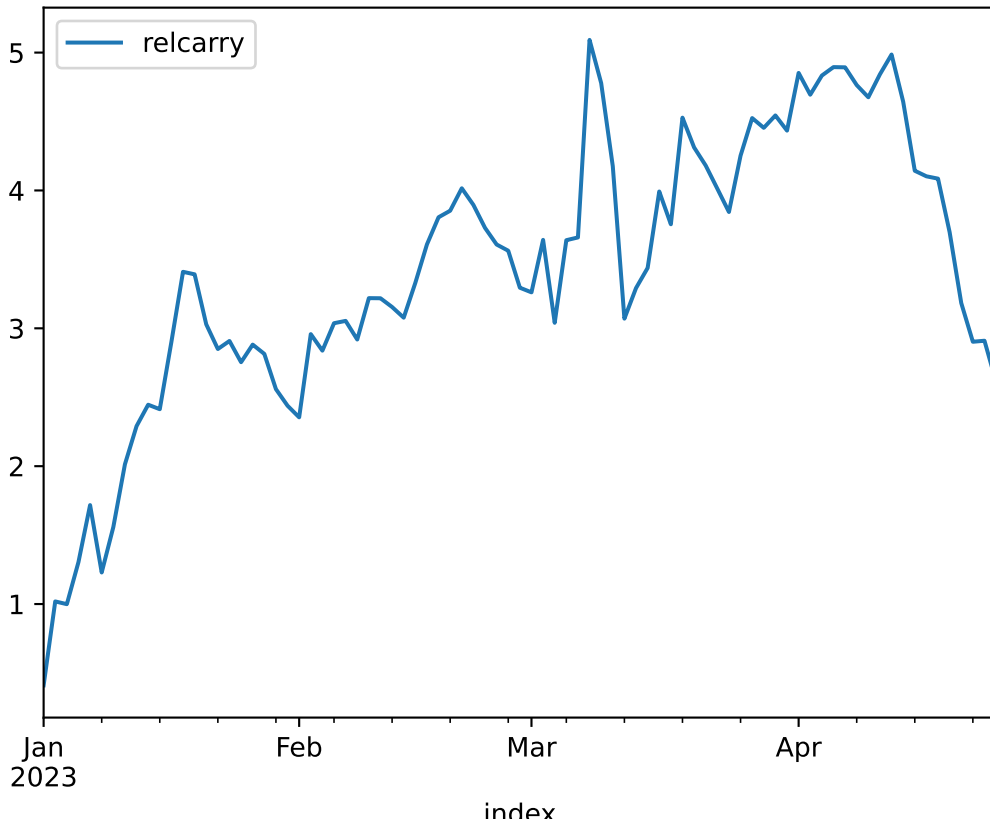
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.963, 'carry125': 4.36, 'carry30': 3.984, 'carry60': 4.268}
ann. std {'carry10': 6.366, 'carry125': 8.957, 'carry30': 6.457, 'carry60': 6.408}
ann. SR {'carry10': 0.47, 'carry125': 0.49, 'carry30': 0.62, 'carry60': 0.67}



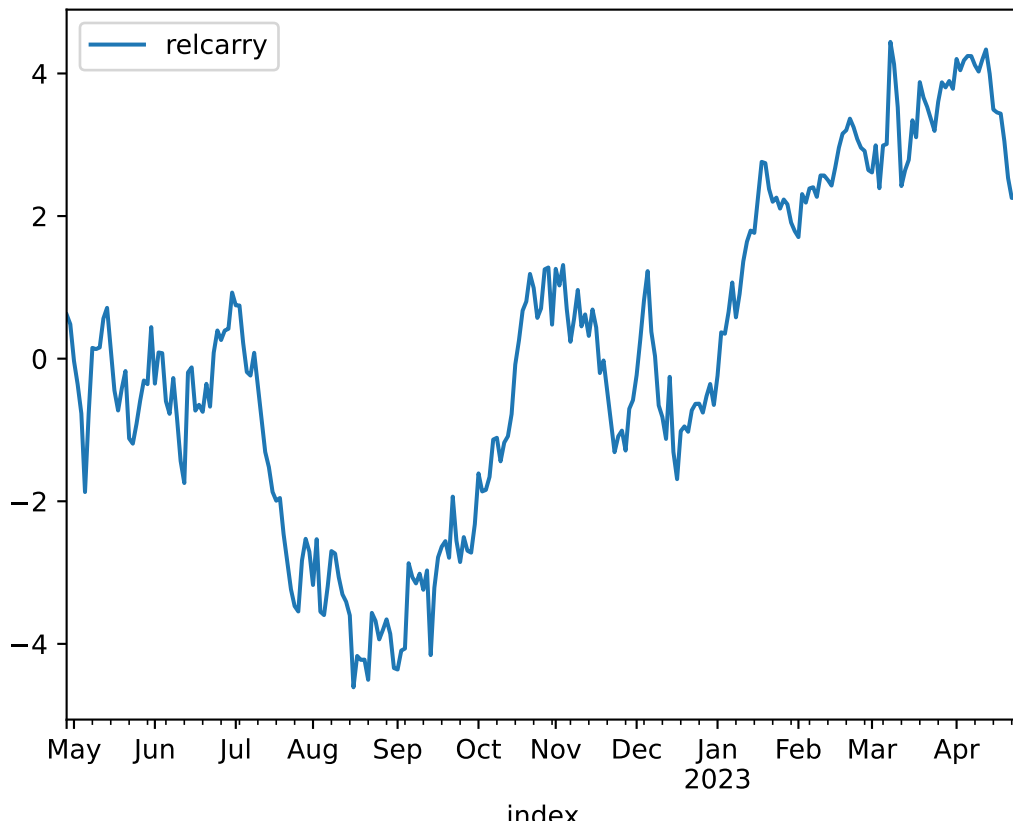
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.201, 'carry125': 7.495, 'carry30': 8.488, 'carry60': 8.199}
ann. std {'carry10': 11.201, 'carry125': 11.558, 'carry30': 11.258, 'carry60': 11.261}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 8.051}
ann. std {'relcarry': 5.677}
ann. SR {'relcarry': 1.42}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 1.931}
ann. std {'relcarry': 6.971}
ann. SR {'relcarry': 0.28}

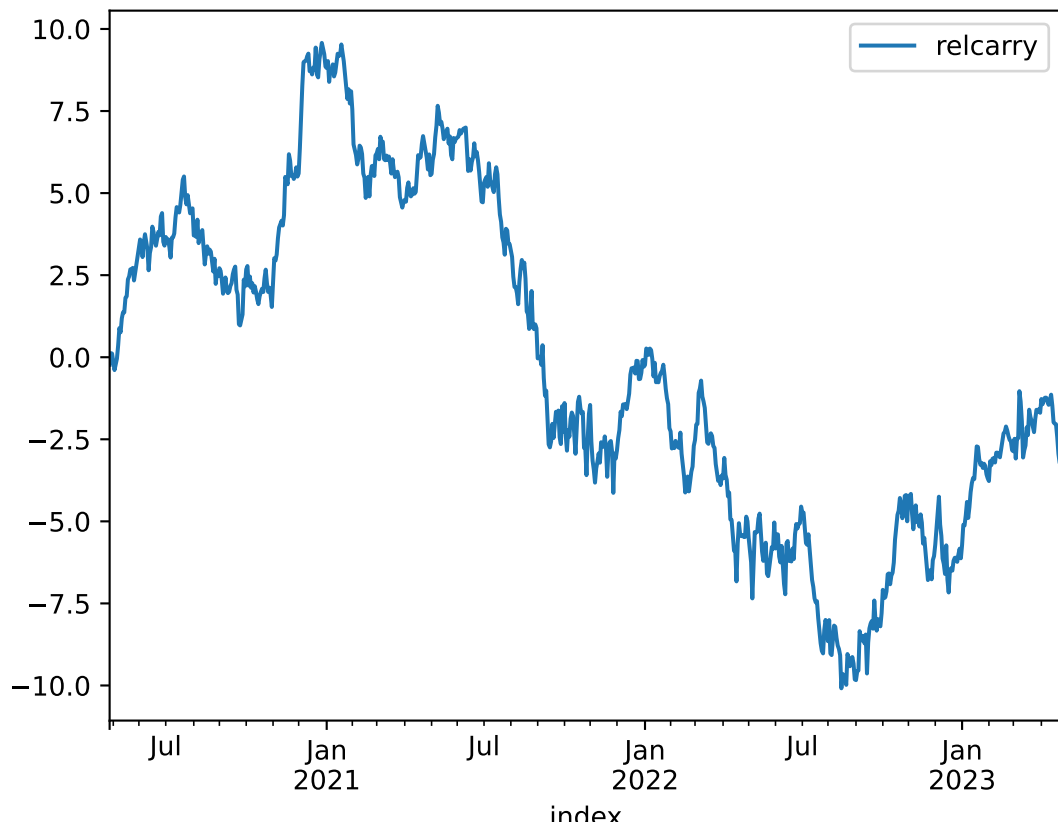


Total Trading Rule P&L for period '3Y'

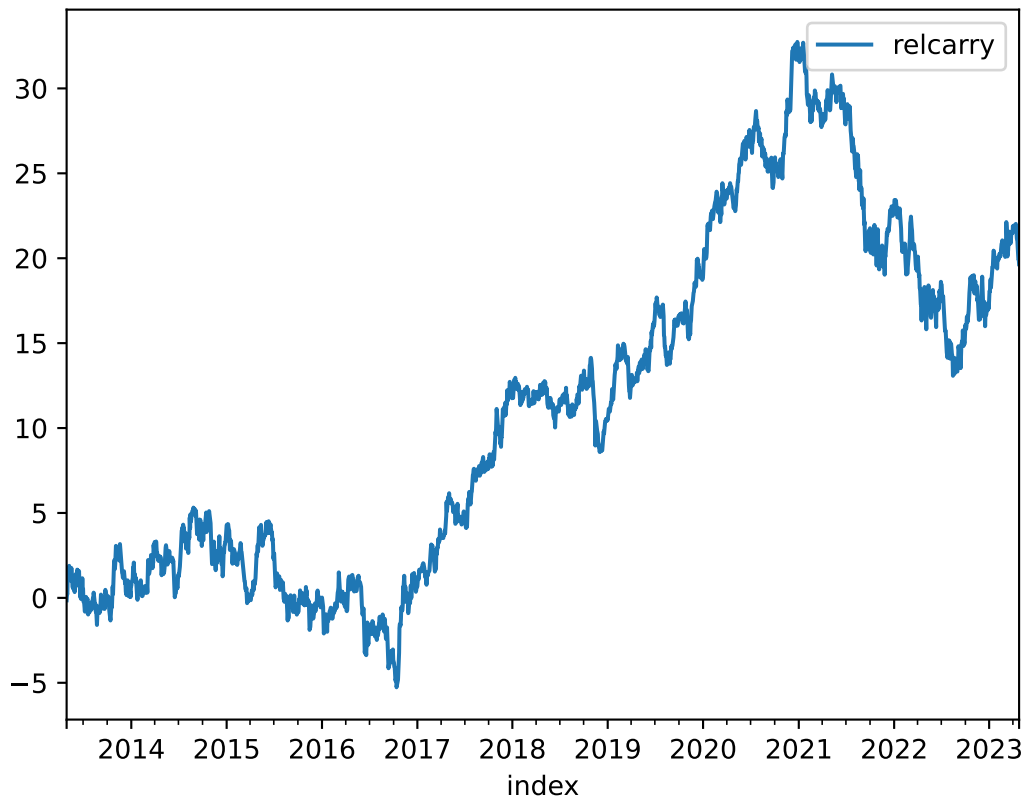
ann. mean {'relcarry': -1.151}

ann. std {'relcarry': 6.657}

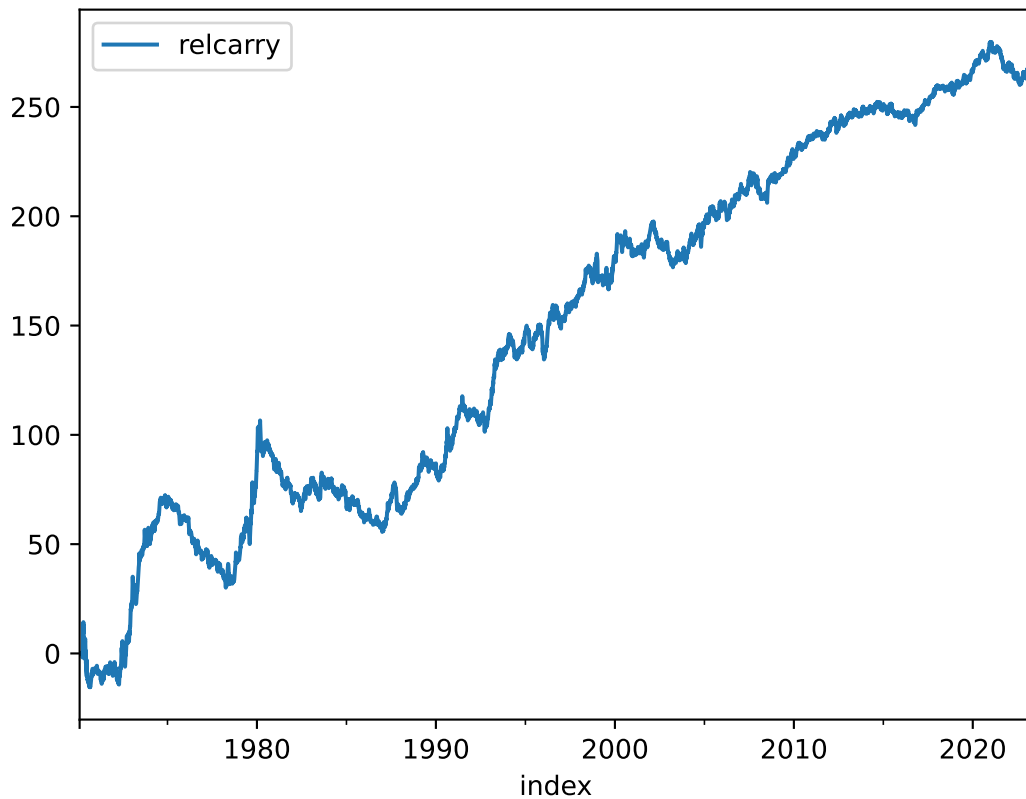
ann. SR {'relcarry': -0.17}



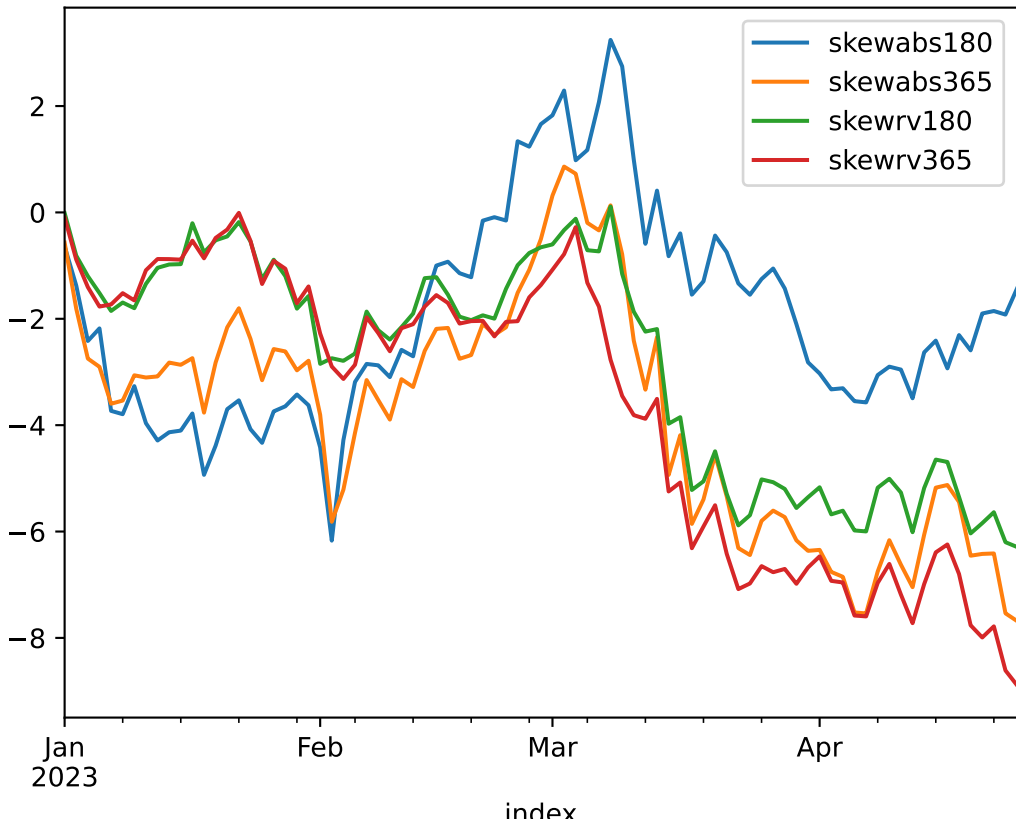
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.929}
ann. std {'relcarry': 5.824}
ann. SR {'relcarry': 0.33}



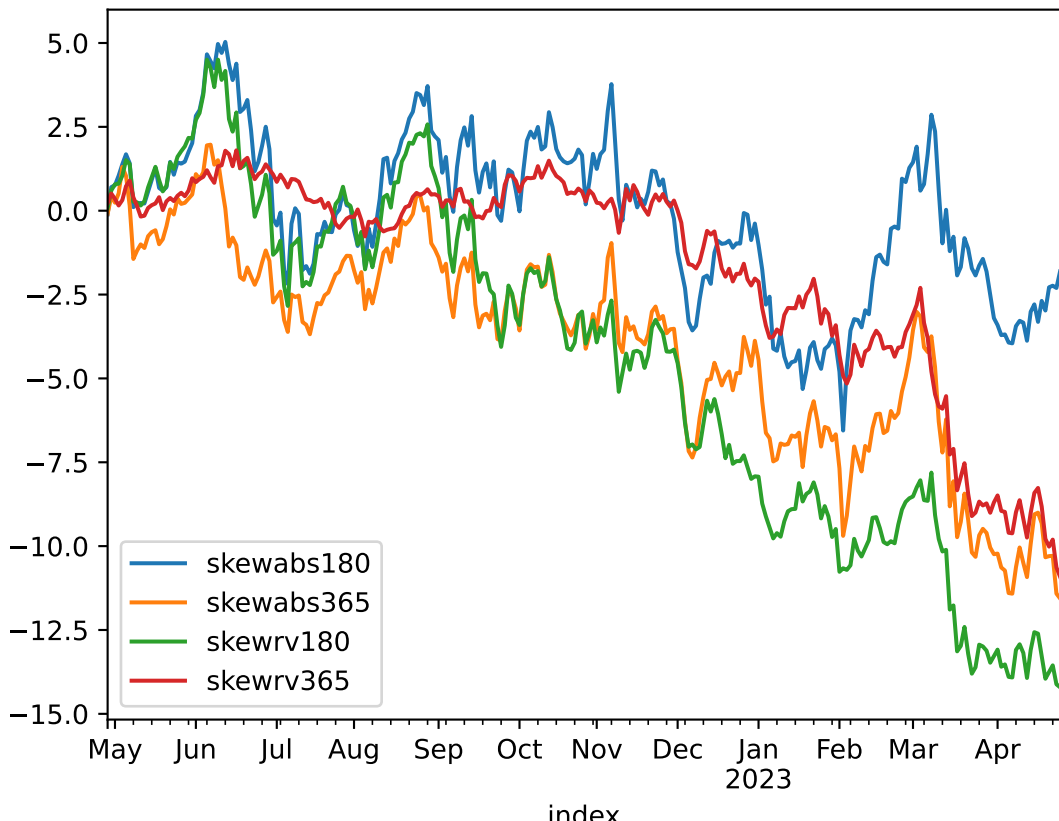
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.916}
ann. std {'relcarry': 8.96}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -4.402, 'skewabs365': -23.697, 'skewrv180': -19.403, 'skewrv365': -27.424}
ann. std {'skewabs180': 11.457, 'skewabs365': 11.77, 'skewrv180': 8.214, 'skewrv365': 8.036}
ann. SR {'skewabs180': -0.38, 'skewabs365': -2.01, 'skewrv180': -2.36, 'skewrv365': -3.41}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -1.782, 'skewabs365': -11.382, 'skewrv180': -13.99, 'skewrv365': -10.746}
ann. std {'skewabs180': 11.052, 'skewabs365': 9.954, 'skewrv180': 9.3, 'skewrv365': 5.777}
ann. SR {'skewabs180': -0.16, 'skewabs365': -1.14, 'skewrv180': -1.5, 'skewrv365': -1.86}

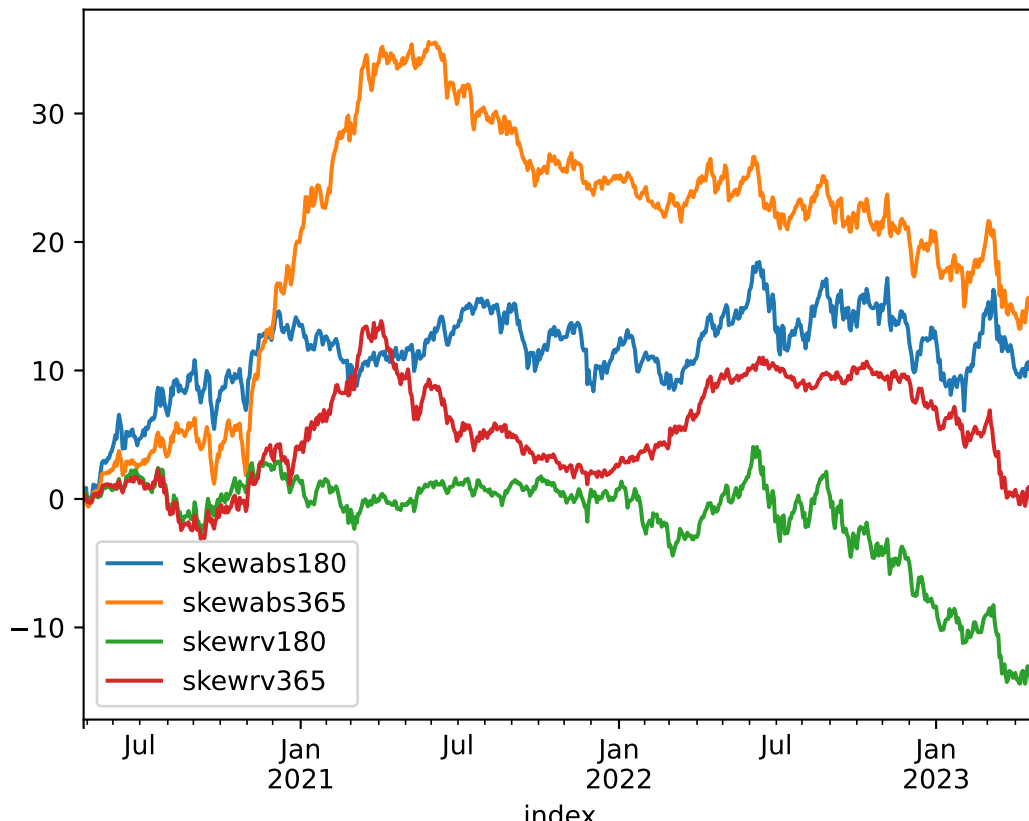


Total Trading Rule P&L for period '3Y'

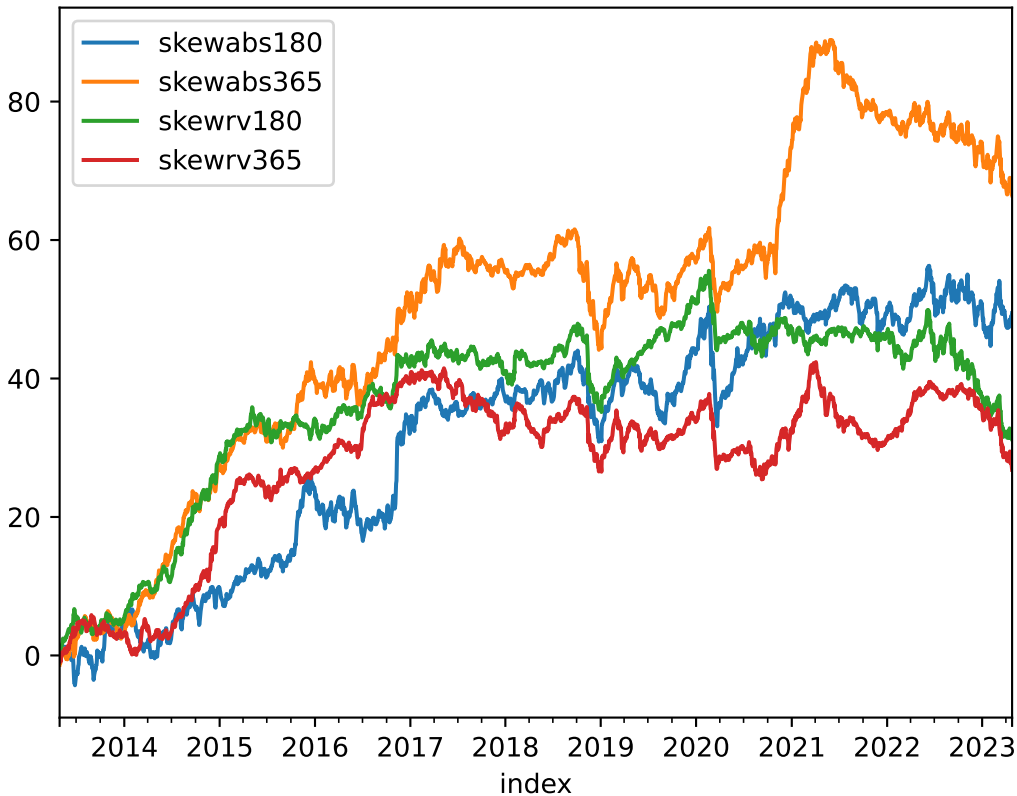
ann. mean {'skewabs180': 3.8, 'skewabs365': 4.29, 'skewrv180': -4.799, 'skewrv365': -0.56}

ann. std {'skewabs180': 9.137, 'skewabs365': 8.927, 'skewrv180': 7.246, 'skewrv365': 6.351}

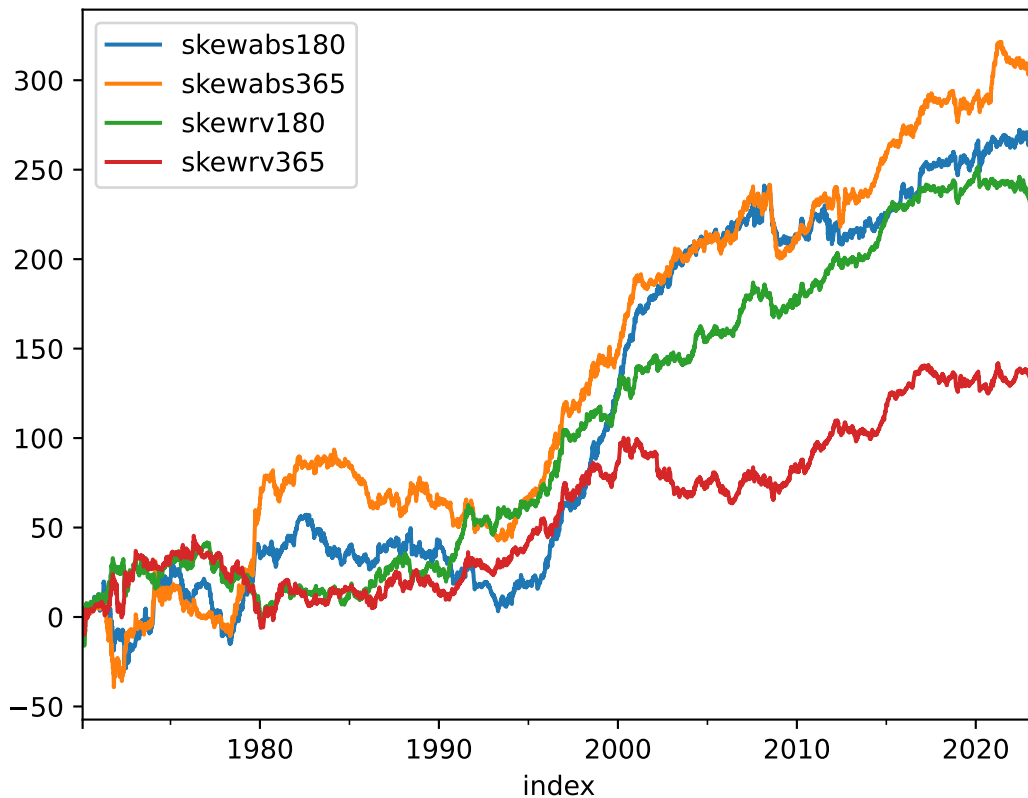
ann. SR {'skewabs180': 0.42, 'skewabs365': 0.48, 'skewrv180': -0.66, 'skewrv365': -0.09}



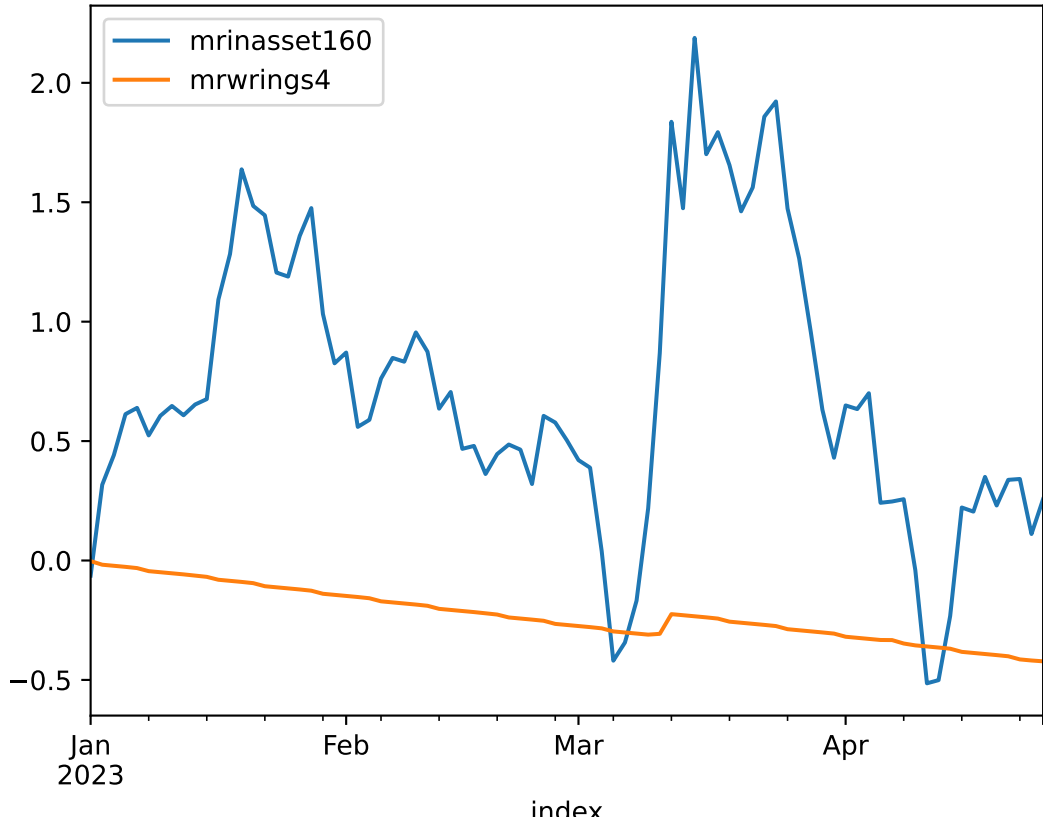
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.853, 'skewabs365': 6.521, 'skewrv180': 3.058, 'skewrv365': 2.632}
ann. std {'skewabs180': 8.012, 'skewabs365': 7.958, 'skewrv180': 6.395, 'skewrv365': 6.057}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.82, 'skewrv180': 0.48, 'skewrv365': 0.43}



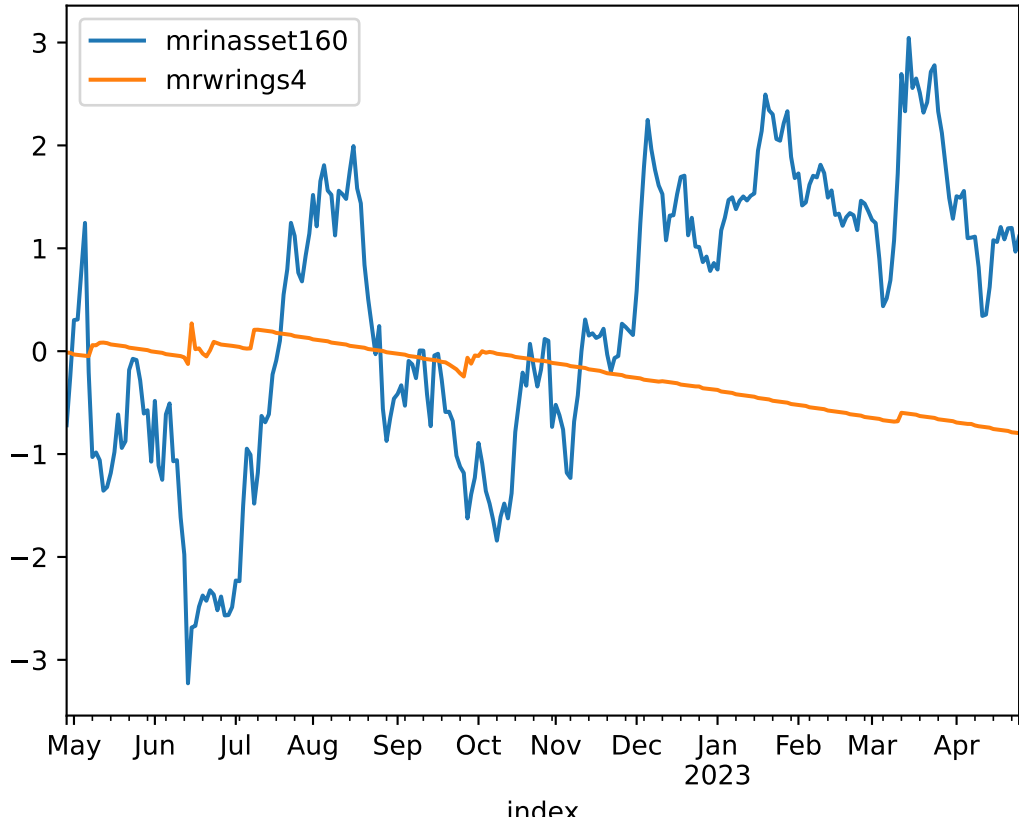
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.893, 'skewabs365': 5.511, 'skewrv180': 4.191, 'skewrv365': 2.327}
ann. std {'skewabs180': 10.1, 'skewabs365': 9.87, 'skewrv180': 8.751, 'skewrv365': 8.125}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



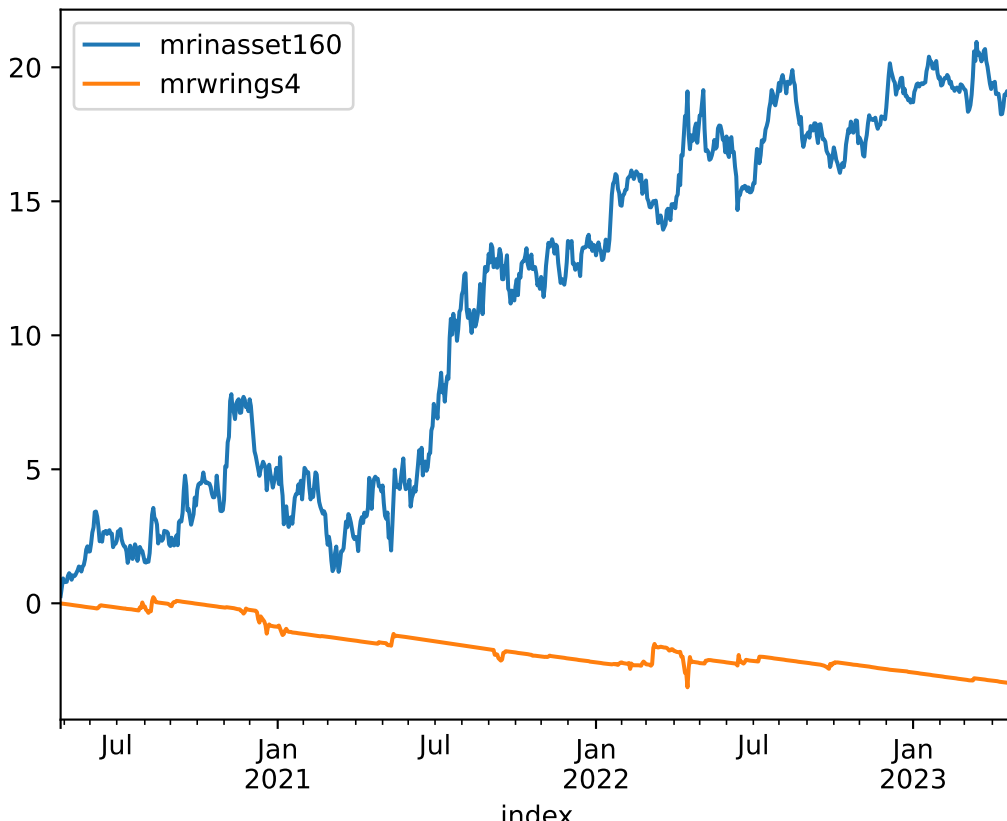
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.792, 'mrwrings4': -1.302}
ann. std {'mrinasset160': 4.226, 'mrwrings4': 0.166}
ann. SR {'mrinasset160': 0.19, 'mrwrings4': -7.84}



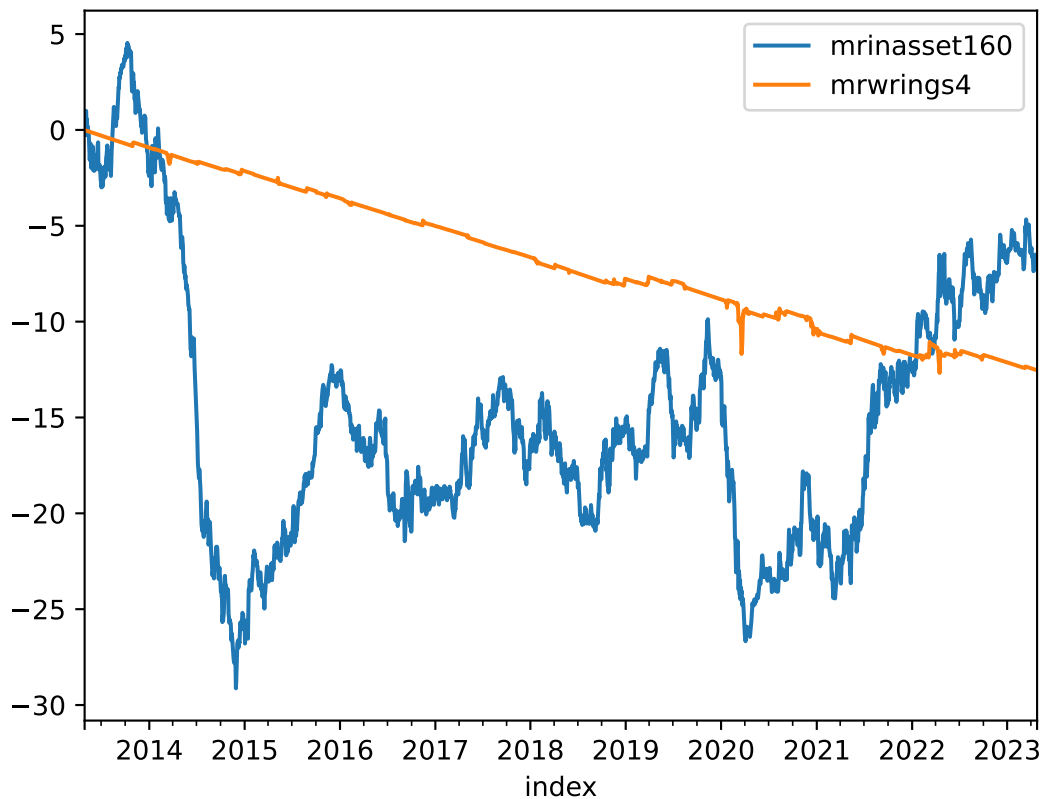
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 1.097, 'mrwrings4': -0.784}
ann. std {'mrinasset160': 5.199, 'mrwrings4': 0.585}
ann. SR {'mrinasset160': 0.21, 'mrwrings4': -1.34}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.225, 'mrwrings4': -0.98}
ann. std {'mrinasset160': 6.26, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 0.99, 'mrwrings4': -0.96}



Total Trading Rule P&L for period '10Y'
ann. mean {'mriasset160': -0.648, 'mrwrings4': -1.231}
ann. std {'mriasset160': 6.213, 'mrwrings4': 0.879}
ann. SR {'mriasset160': -0.1, 'mrwrings4': -1.4}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.559, 'mrwrings4': -2.145}
ann. std {'mrinasset160': 9.867, 'mrwrings4': 2.088}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

