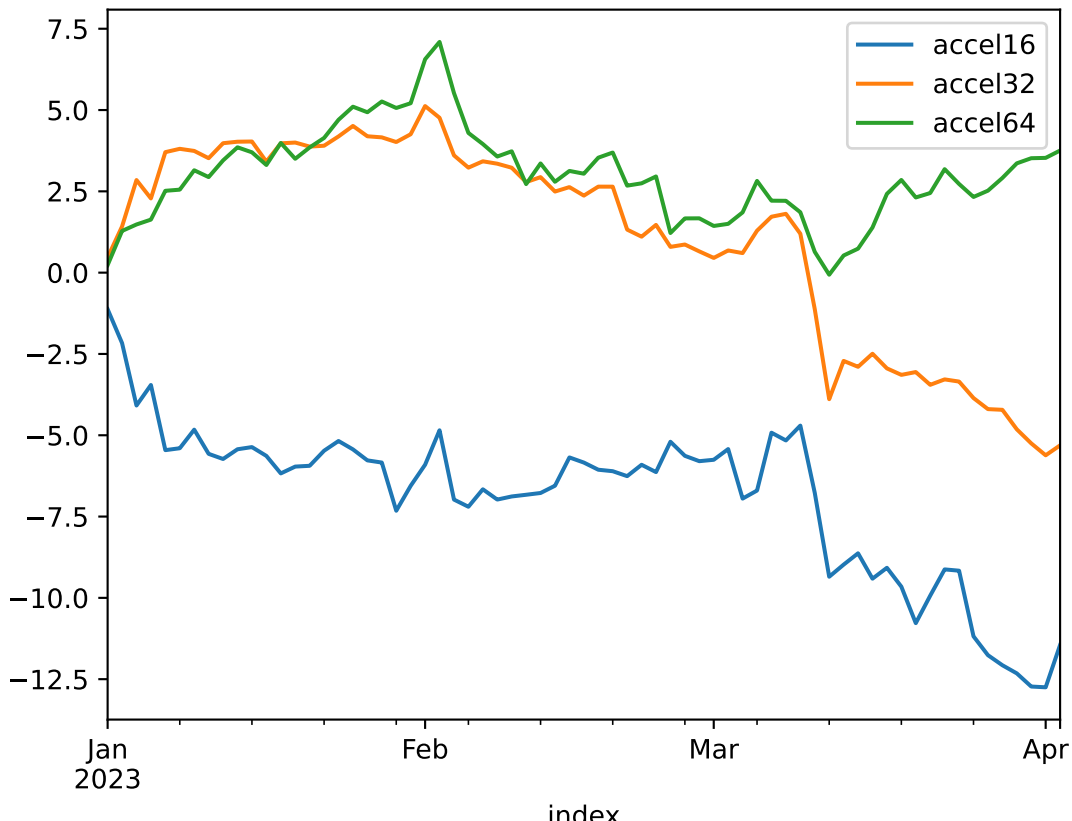
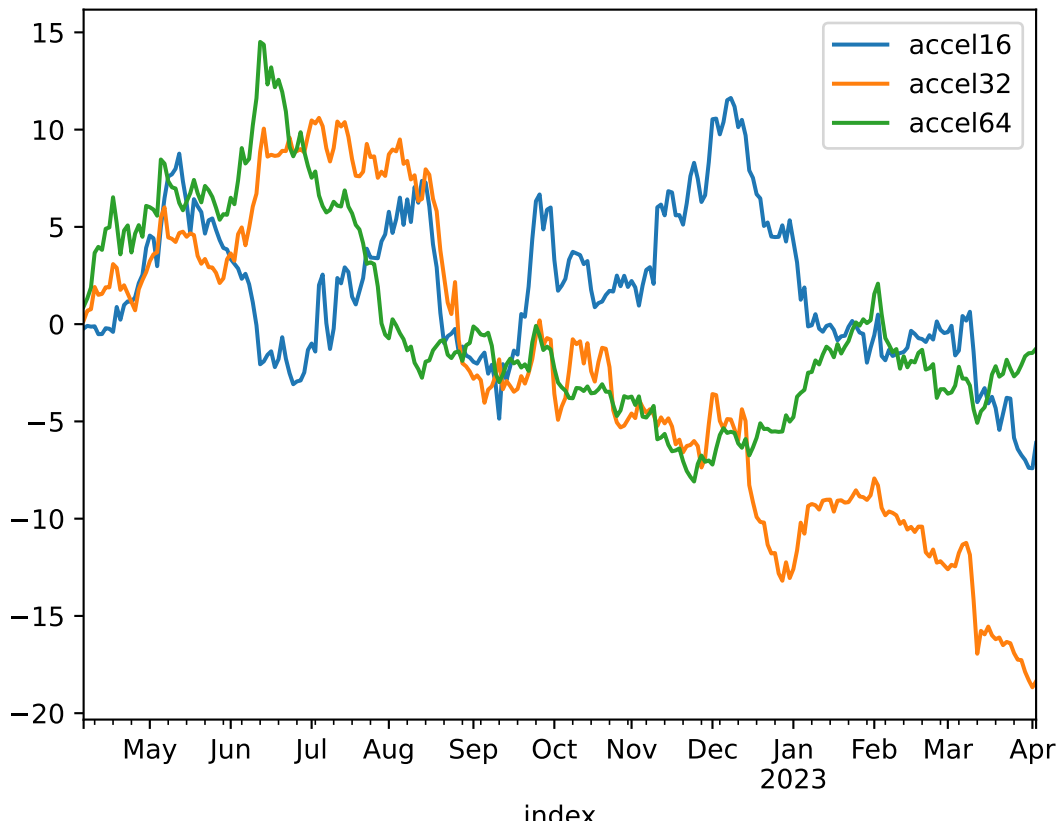


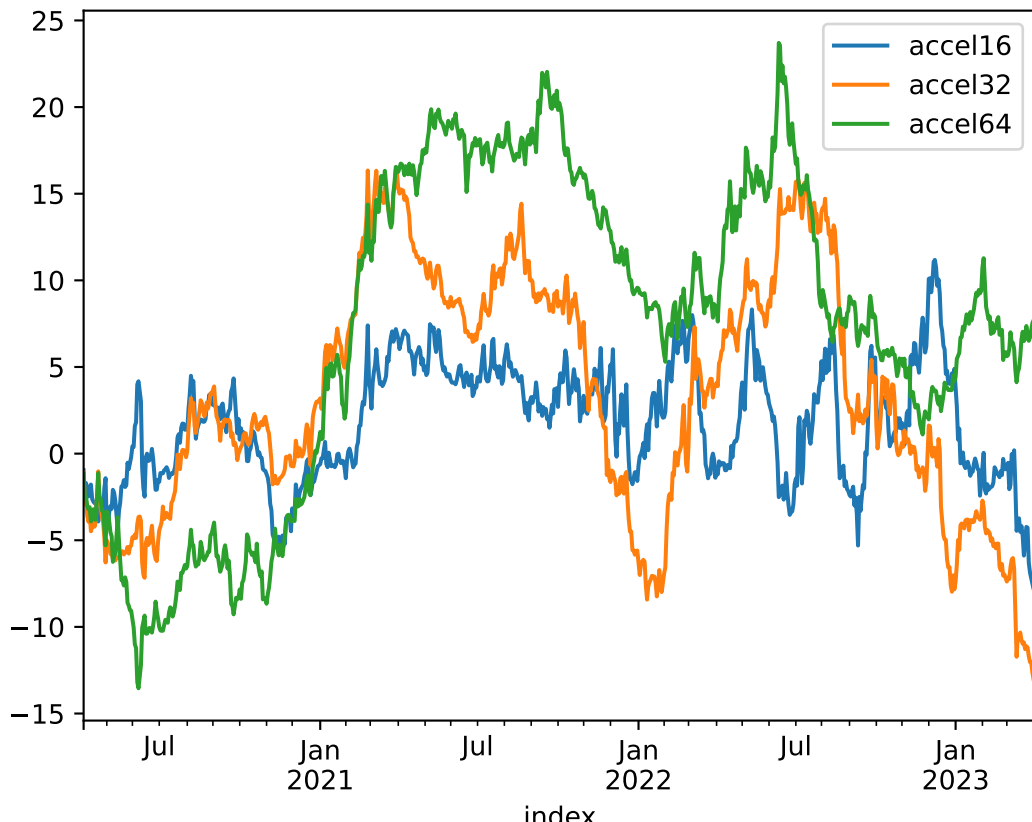
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -43.744, 'accel32': -20.291, 'accel64': 14.347}
ann. std {'accel16': 13.799, 'accel32': 10.648, 'accel64': 9.756}
ann. SR {'accel16': -3.17, 'accel32': -1.91, 'accel64': 1.47}



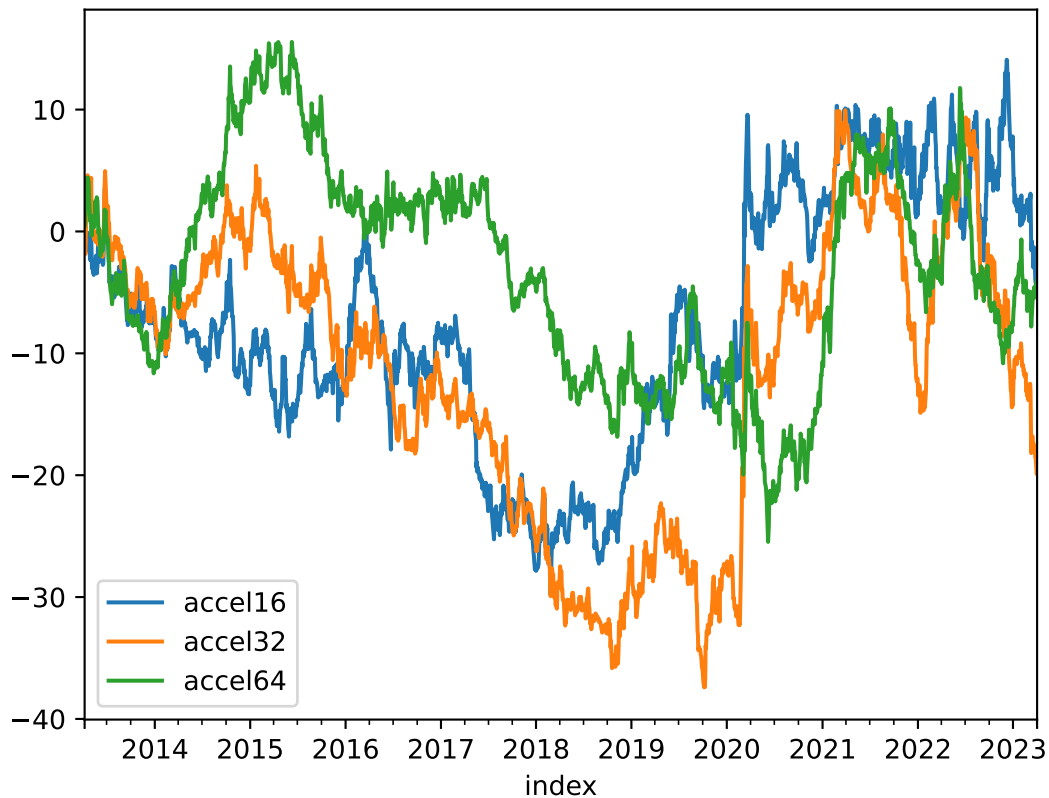
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -6.015, 'accel32': -18.081, 'accel64': -1.238}
ann. std {'accel16': 16.036, 'accel32': 13.15, 'accel64': 11.382}
ann. SR {'accel16': -0.38, 'accel32': -1.37, 'accel64': -0.11}



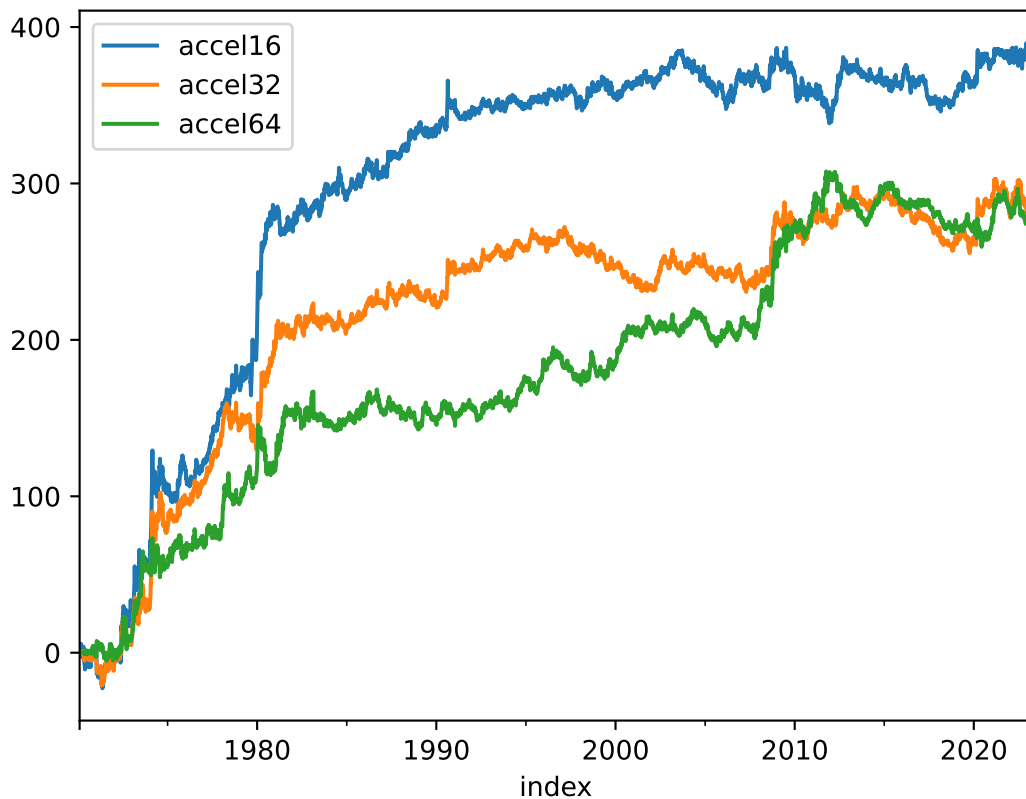
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.146, 'accel32': -4.303, 'accel64': 2.599}
ann. std {'accel16': 13.679, 'accel32': 11.927, 'accel64': 10.728}
ann. SR {'accel16': -0.16, 'accel32': -0.36, 'accel64': 0.24}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.358, 'accel32': -1.925, 'accel64': -0.392}
ann. std {'accel16': 11.713, 'accel32': 10.743, 'accel64': 9.345}
ann. SR {'accel16': -0.03, 'accel32': -0.18, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.868, 'accel32': 5.044, 'accel64': 5.186}
ann. std {'accel16': 14.134, 'accel32': 12.458, 'accel64': 12.107}
ann. SR {'accel16': 0.49, 'accel32': 0.4, 'accel64': 0.43}

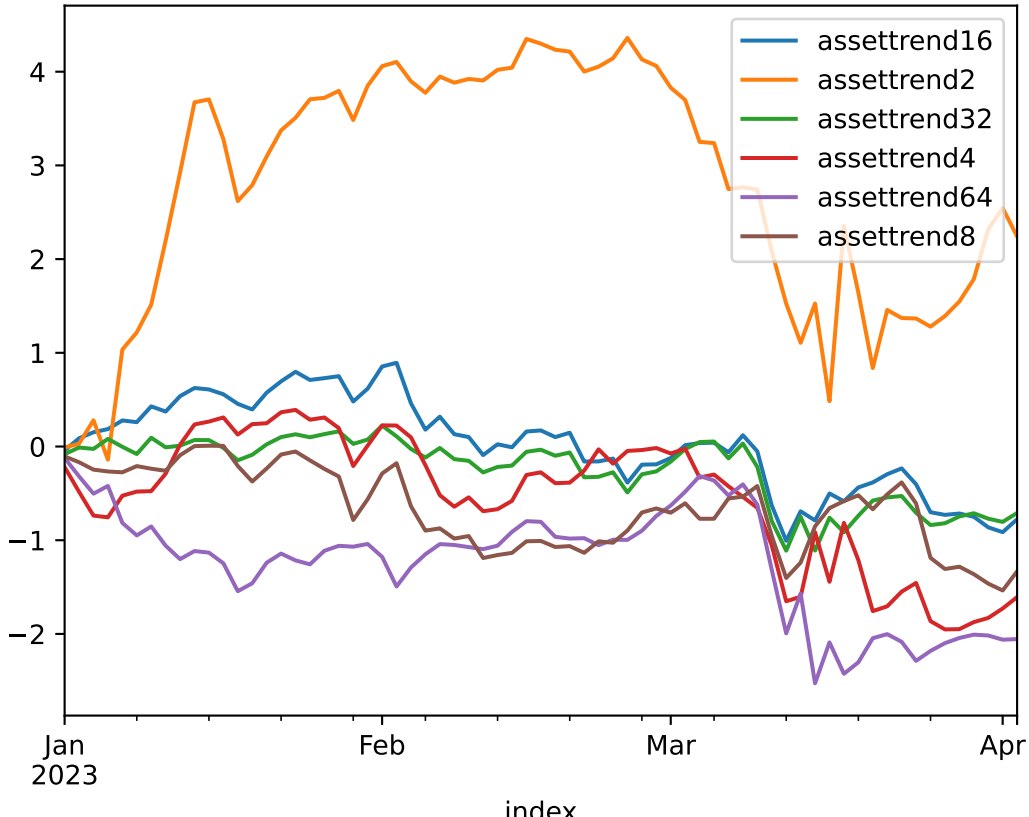


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -2.965, 'assettrend2': 8.565, 'assettrend32': -2.71, 'assettrend4': -6.139, 'assettrend64': -7.852, 'assettrend8': -5.09}

ann. std {'assettrend16': 2.707, 'assettrend2': 7.108, 'assettrend32': 2.458, 'assettrend4': 3.787, 'assettrend64': 3.65, 'assettrend8': 2.996}

ann. SR {'assettrend16': -1.1, 'assettrend2': 1.2, 'assettrend32': -1.1, 'assettrend4': -1.62, 'assettrend64': -2.15, 'assettrend8': -1.7}

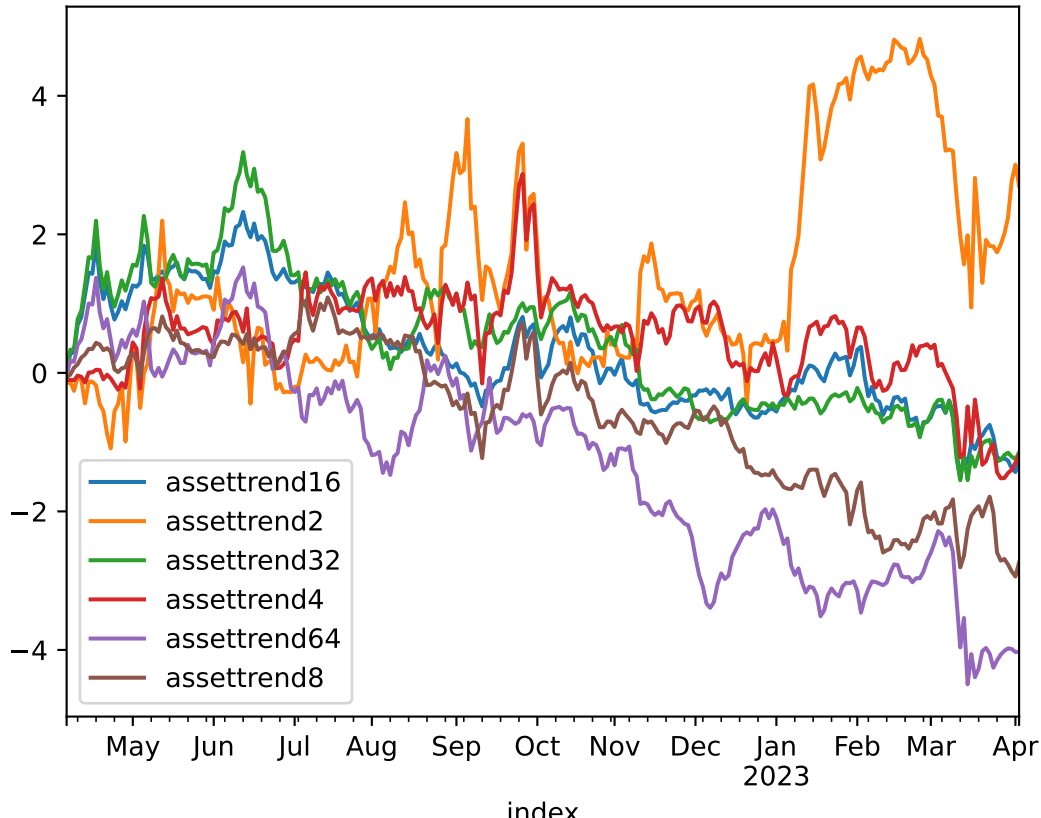


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -1.274, 'assettrend2': 2.661, 'assettrend32': -1.131, 'assettrend4': -1.159, 'assettrend64': -3.962, 'assettrend8': -2.695}

ann. std {'assettrend16': 2.518, 'assettrend2': 6.414, 'assettrend32': 2.904, 'assettrend4': 3.937, 'assettrend64': 3.273, 'assettrend8': 2.616}

ann. SR {'assettrend16': -0.51, 'assettrend2': 0.41, 'assettrend32': -0.39, 'assettrend4': -0.29, 'assettrend64': -1.21, 'assettrend8': -1.03}

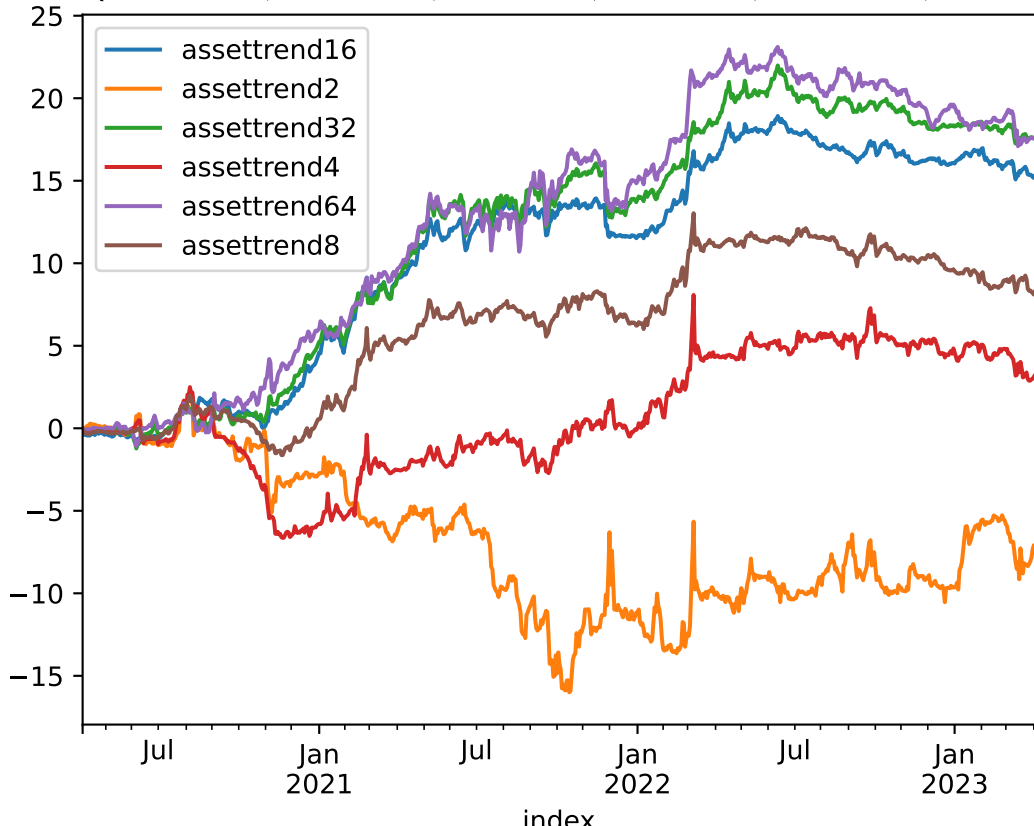


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.011, 'assettrend2': -2.419, 'assettrend32': 5.778, 'assettrend4': 1.058, 'assettrend64': 5.75, 'assettrend8': 2.719}

ann. std {'assettrend16': 3.404, 'assettrend2': 7.783, 'assettrend32': 4.118, 'assettrend4': 4.926, 'assettrend64': 4.992, 'assettrend8': 3.503}

ann. SR {'assettrend16': 1.47, 'assettrend2': -0.31, 'assettrend32': 1.4, 'assettrend4': 0.21, 'assettrend64': 1.15, 'assettrend8': 0.78}

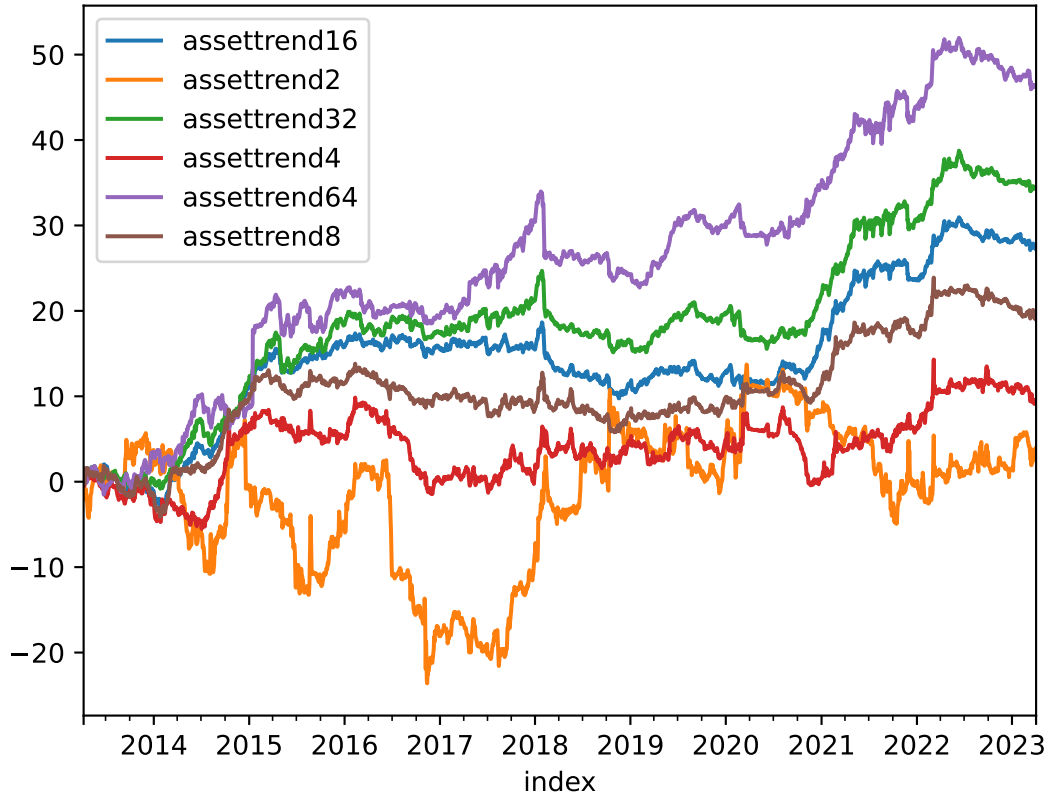


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.685, 'assettrend2': 0.362, 'assettrend32': 3.38, 'assettrend4': 0.929, 'assettrend64': 4.557, 'assettrend8': 1.882}

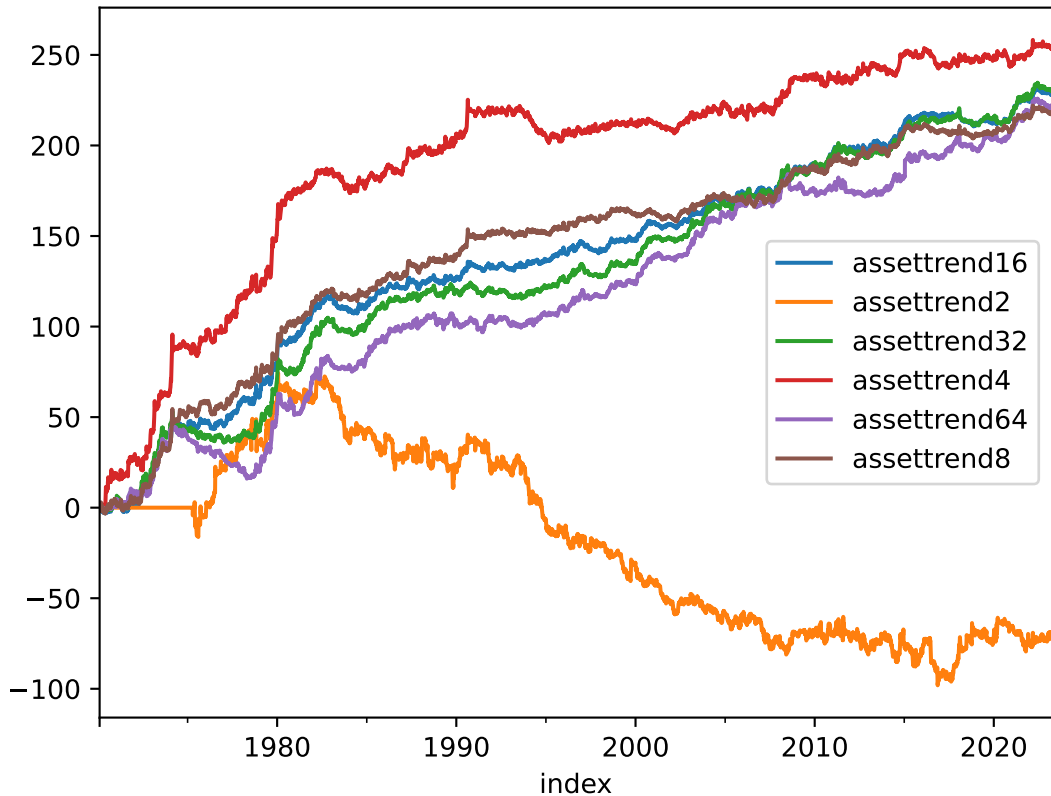
ann. std {'assettrend16': 3.164, 'assettrend2': 9.802, 'assettrend32': 3.597, 'assettrend4': 4.982, 'assettrend64': 5.2, 'assettrend8': 3.474}

ann. SR {'assettrend16': 0.85, 'assettrend2': 0.04, 'assettrend32': 0.94, 'assettrend4': 0.19, 'assettrend64': 0.88, 'assettrend8': 0.54}



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

ann. mean {'assettrend16': 4.21, 'assettrend2': -1.307, 'assettrend32': 4.251, 'assettrend4': 4.677, 'assettrend64': 4.067, 'assettrend8': 4.01}
ann. std {'assettrend16': 4.305, 'assettrend2': 10.264, 'assettrend32': 4.497, 'assettrend4': 6.549, 'assettrend64': 4.997, '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': 21.681, 'breakout160': 0.049, 'breakout20': -20.34, 'breakout320': -10.936, 'breakout40': -21.184, 'breakout80': 0.248}

ann. std {'breakout10': 15.1, 'breakout160': 8.448, 'breakout20': 8.025, 'breakout320': 10.498, 'breakout40': 7.801, 'breakout80': 8.595}

ann. SR {'breakout10': 1.44, 'breakout160': 0.01, 'breakout20': -2.53, 'breakout320': -1.04, 'breakout40': -2.72, 'breakout80': 0.03}

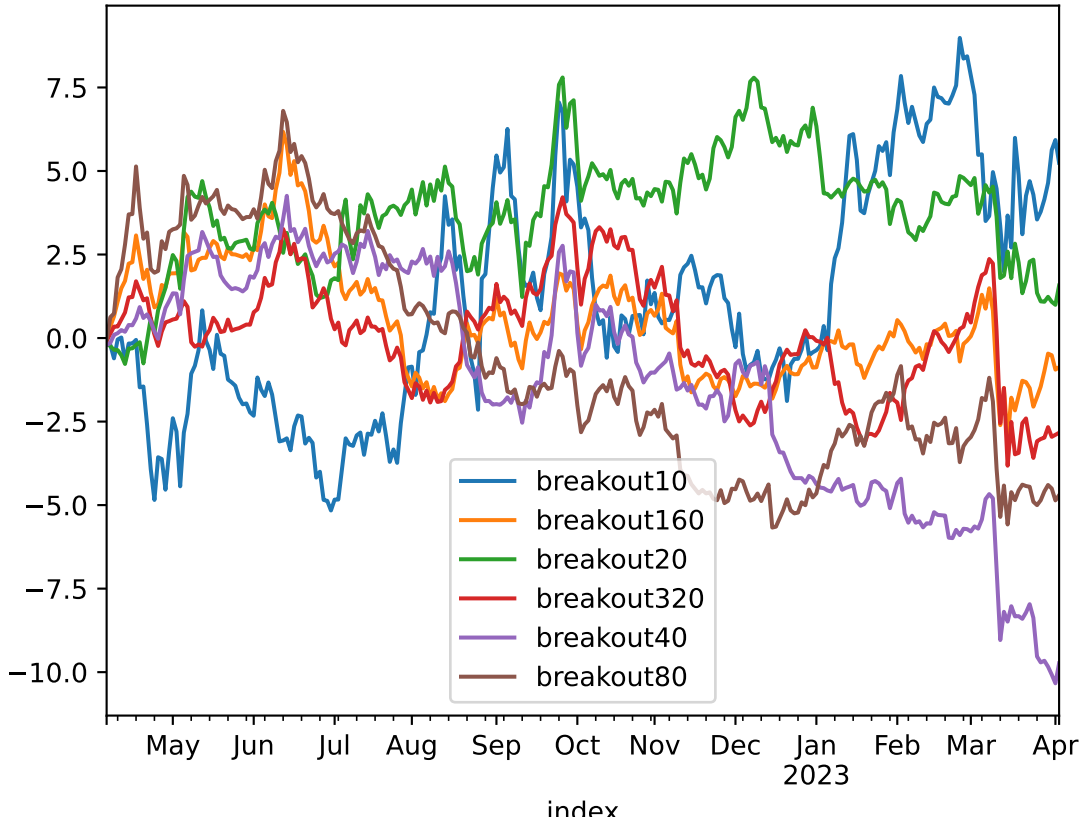


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 5.165, 'breakout160': -0.859, 'breakout20': 1.547, 'breakout320': -2.792, 'breakout40': -9.586, 'breakout80': -4.632}

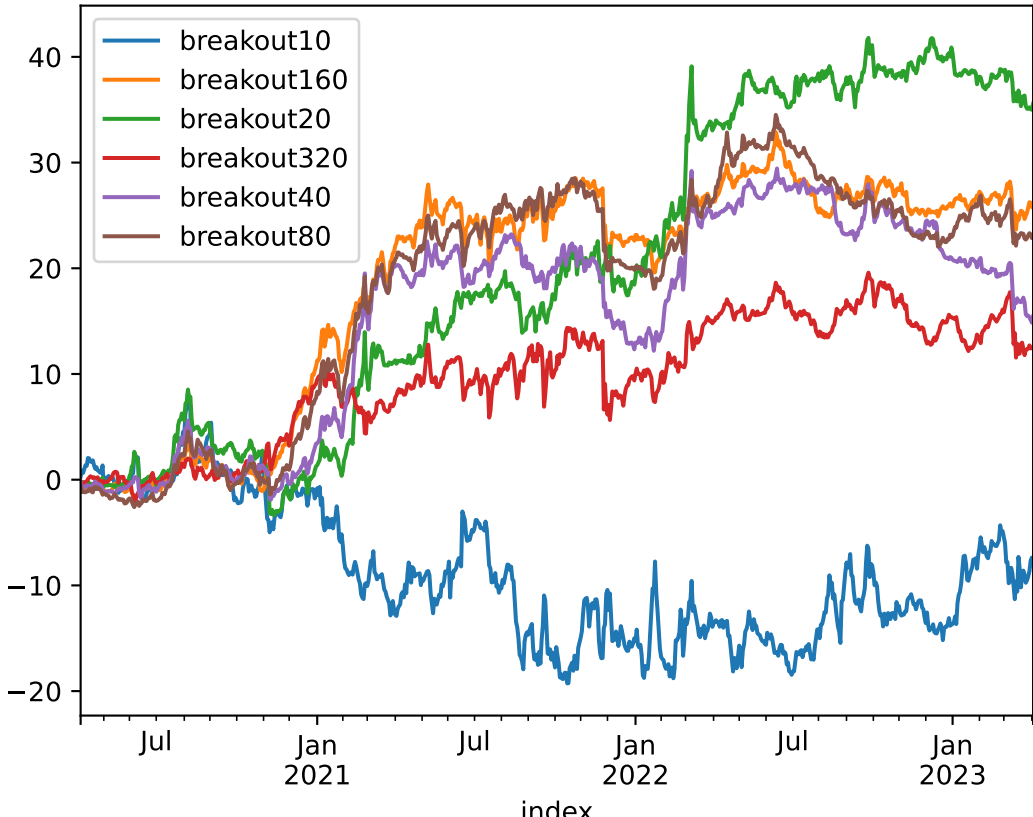
ann. std {'breakout10': 13.603, 'breakout160': 7.153, 'breakout20': 8.59, 'breakout320': 7.566, 'breakout40': 7.186, 'breakout80': 7.342}

ann. SR {'breakout10': 0.38, 'breakout160': -0.12, 'breakout20': 0.18, 'breakout320': -0.37, 'breakout40': -1.33, 'breakout80': -0.63}



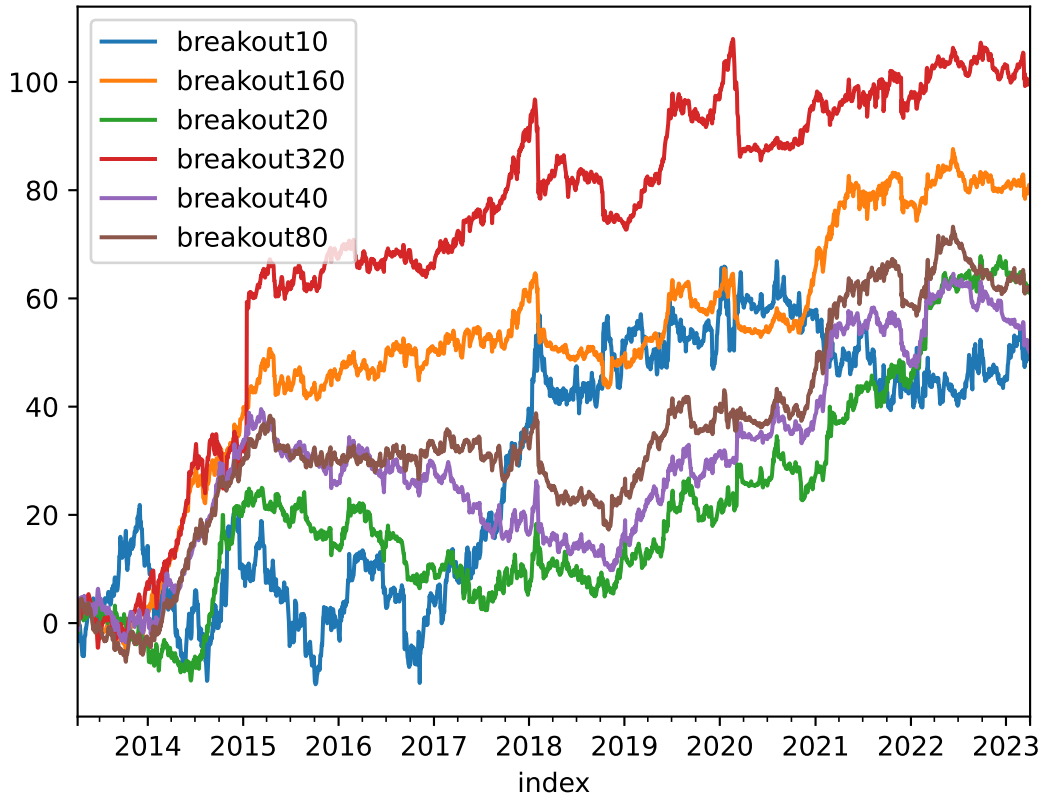
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -2.636, 'breakout160': 8.46, 'breakout20': 11.643, 'breakout320': 4.104, 'breakout40': 5.059, 'breakout80': 7.533}
ann. std {'breakout10': 15.048, 'breakout160': 9.166, 'breakout20': 11.006, 'breakout320': 9.887, 'breakout40': 9.458, 'breakout80': 8.908}
ann. SR {'breakout10': -0.18, 'breakout160': 0.92, 'breakout20': 1.06, 'breakout320': 0.42, 'breakout40': 0.53, 'breakout80': 0.85}



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

ann. mean {'breakout10': 4.965, 'breakout160': 7.912, 'breakout20': 6.049, 'breakout320': 9.842, 'breakout40': 4.966, 'breakout80': 6.065}
ann. std {'breakout10': 17.853, 'breakout160': 8.888, 'breakout20': 11.131, 'breakout320': 13.095, 'breakout40': 9.458, 'breakout80': 8.763}
ann. SR {'breakout10': 0.28, 'breakout160': 0.89, 'breakout20': 0.54, 'breakout320': 0.75, 'breakout40': 0.53, 'breakout80': 0.69}

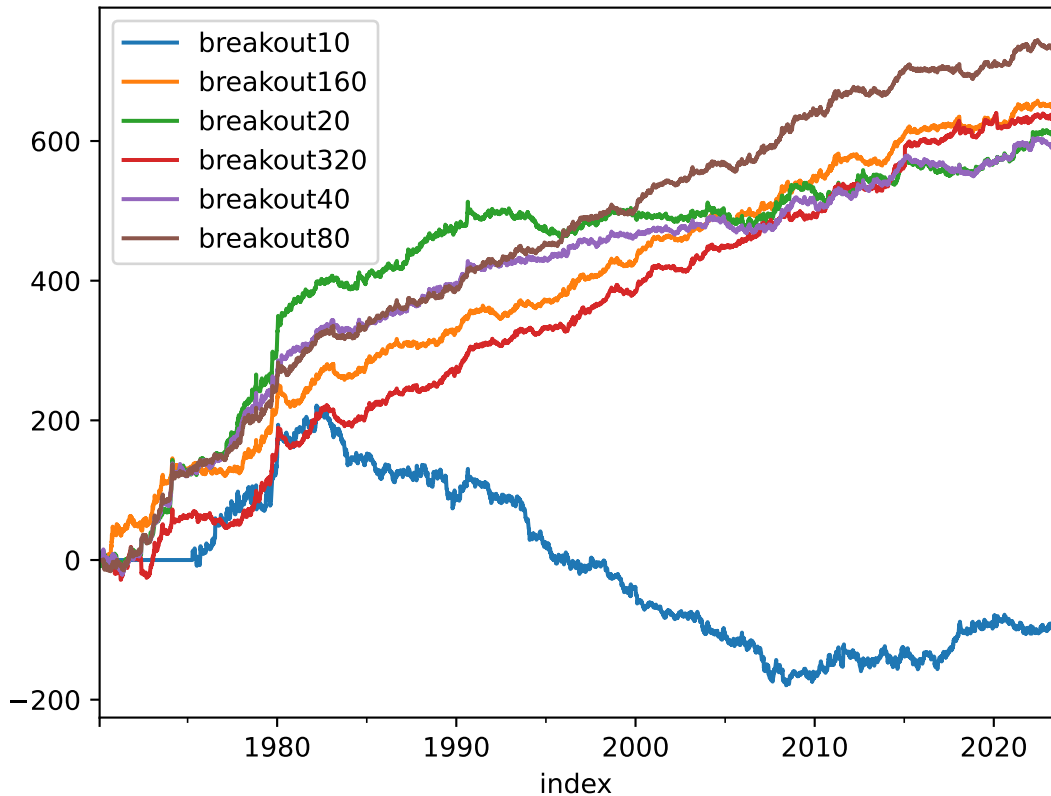


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.747, 'breakout160': 12.011, 'breakout20': 11.248, 'breakout320': 11.673, 'breakout40': 10.895, 'breakout80': 13.534}

ann. std {'breakout10': 21.329, 'breakout160': 11.534, 'breakout20': 14.896, 'breakout320': 12.12, 'breakout40': 12.117, 'breakout80': 11.722}

ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.76, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

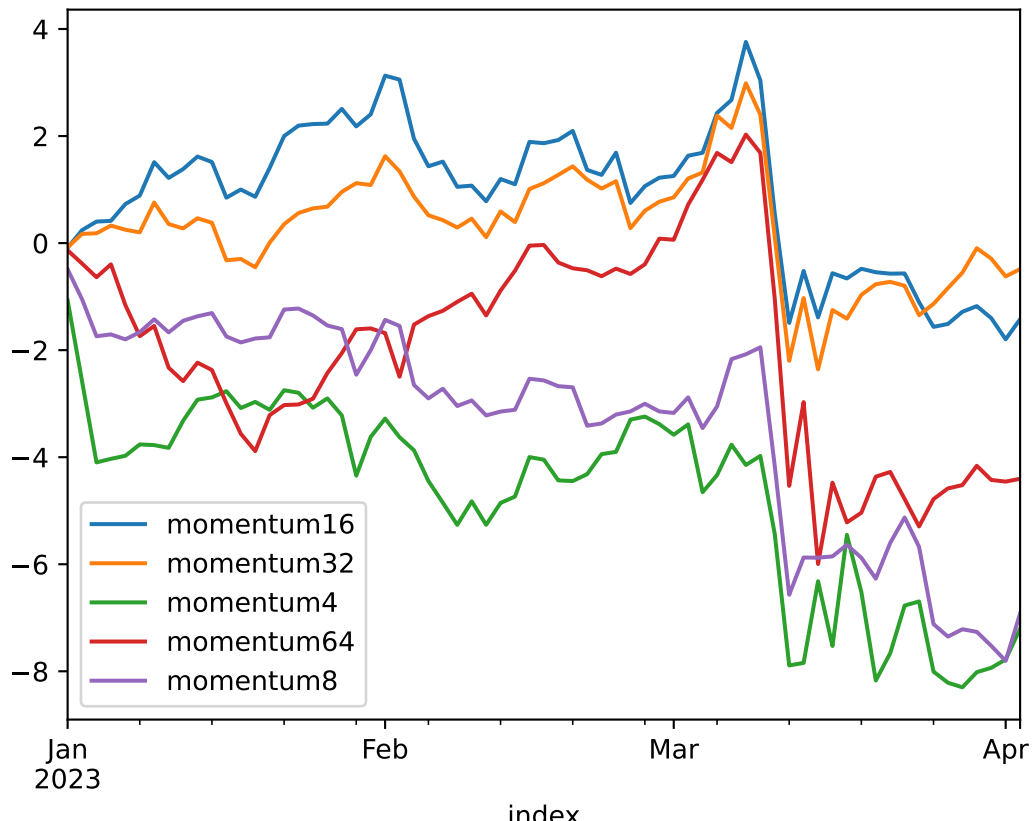


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -5.432, 'momentum32': -1.854, 'momentum4': -27.528, 'momentum64': -16.825, 'momentum8': -26.441}

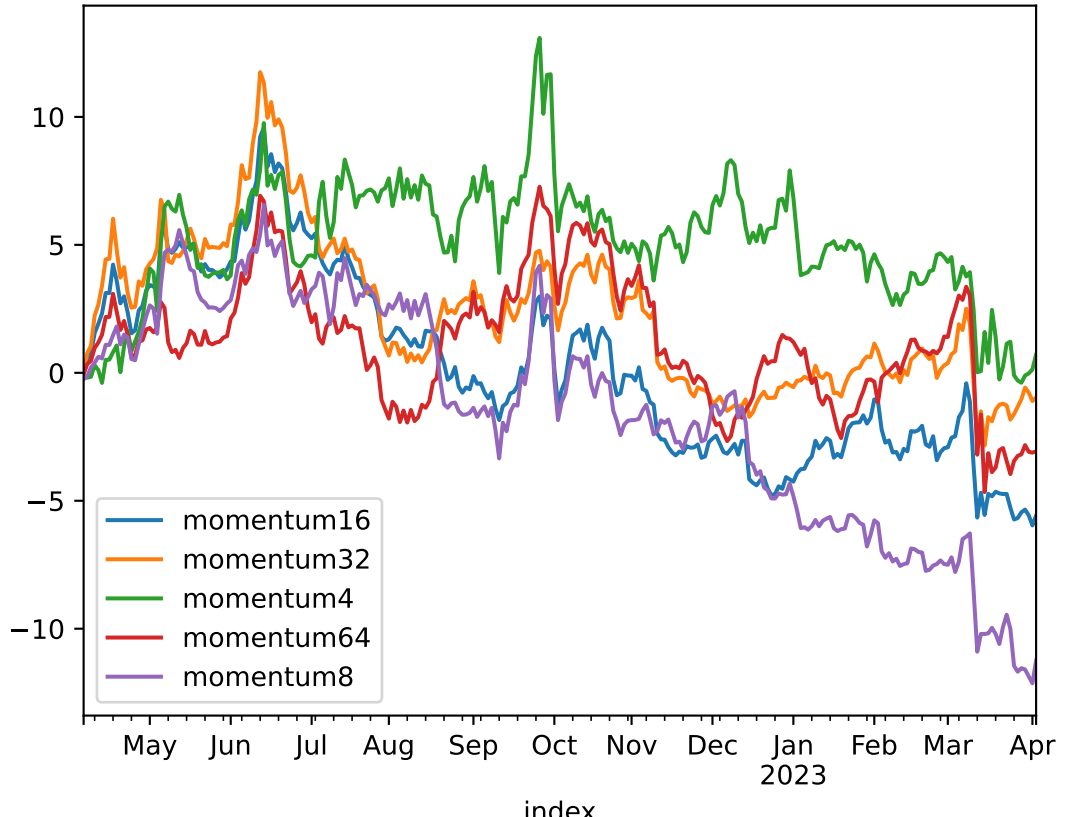
ann. std {'momentum16': 9.5, 'momentum32': 9.391, 'momentum4': 11.844, 'momentum64': 12.972, 'momentum8': 9.169}

ann. SR {'momentum16': -0.57, 'momentum32': -0.2, 'momentum4': -2.32, 'momentum64': -1.3, 'momentum8': -2.88}



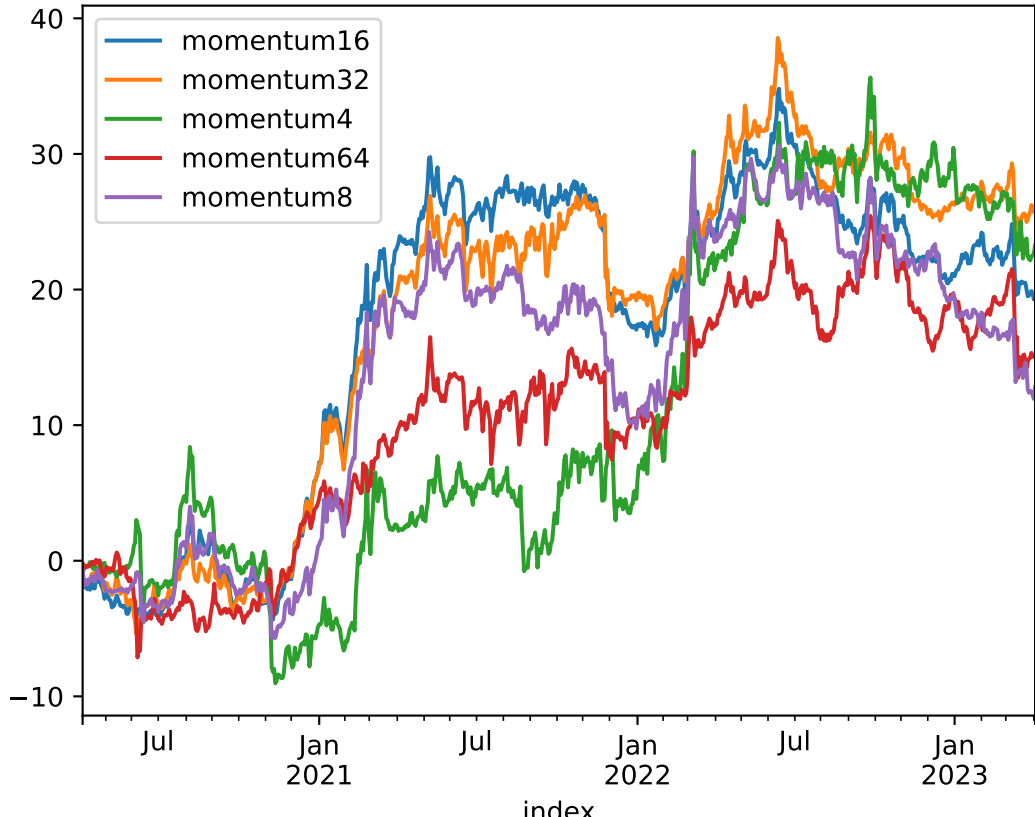
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -5.502, 'momentum32': -0.951, 'momentum4': 0.696, 'momentum64': -3.02, 'momentum8': -11.075}
ann. std {'momentum16': 9.06, 'momentum32': 9.731, 'momentum4': 13.579, 'momentum64': 10.397, 'momentum8': 10.028}
ann. SR {'momentum16': -0.61, 'momentum32': -0.1, 'momentum4': 0.05, 'momentum64': -0.29, 'momentum8': -1.1}



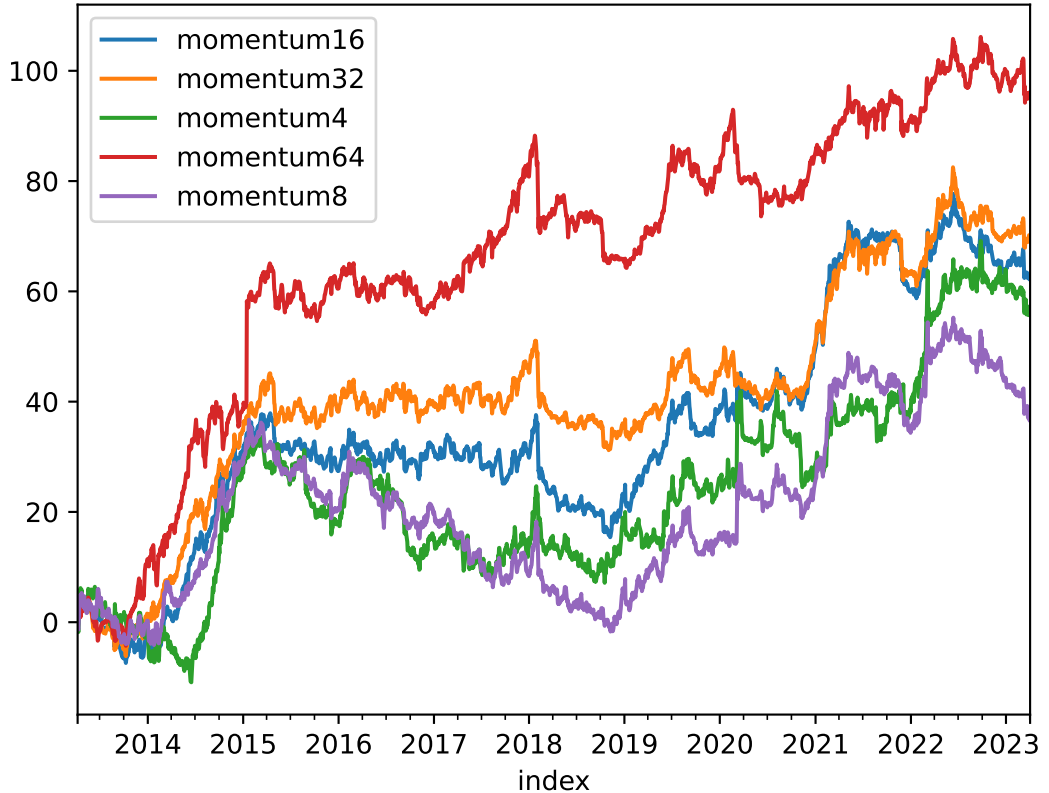
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 6.432, 'momentum32': 8.46, 'momentum4': 7.612, 'momentum64': 4.938, 'momentum8': 4.198}
ann. std {'momentum16': 10.172, 'momentum32': 10.403, 'momentum4': 14.594, 'momentum64': 10.819, 'momentum8': 11.421}
ann. SR {'momentum16': 0.63, 'momentum32': 0.81, 'momentum4': 0.52, 'momentum64': 0.46, 'momentum8': 0.37}



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

ann. mean {'momentum16': 6.139, 'momentum32': 6.853, 'momentum4': 5.575, 'momentum64': 9.408, 'momentum8': 3.675}
ann. std {'momentum16': 9.707, 'momentum32': 9.288, 'momentum4': 13.747, 'momentum64': 11.877, 'momentum8': 10.929}
ann. SR {'momentum16': 0.63, 'momentum32': 0.74, 'momentum4': 0.41, 'momentum64': 0.79, 'momentum8': 0.34}

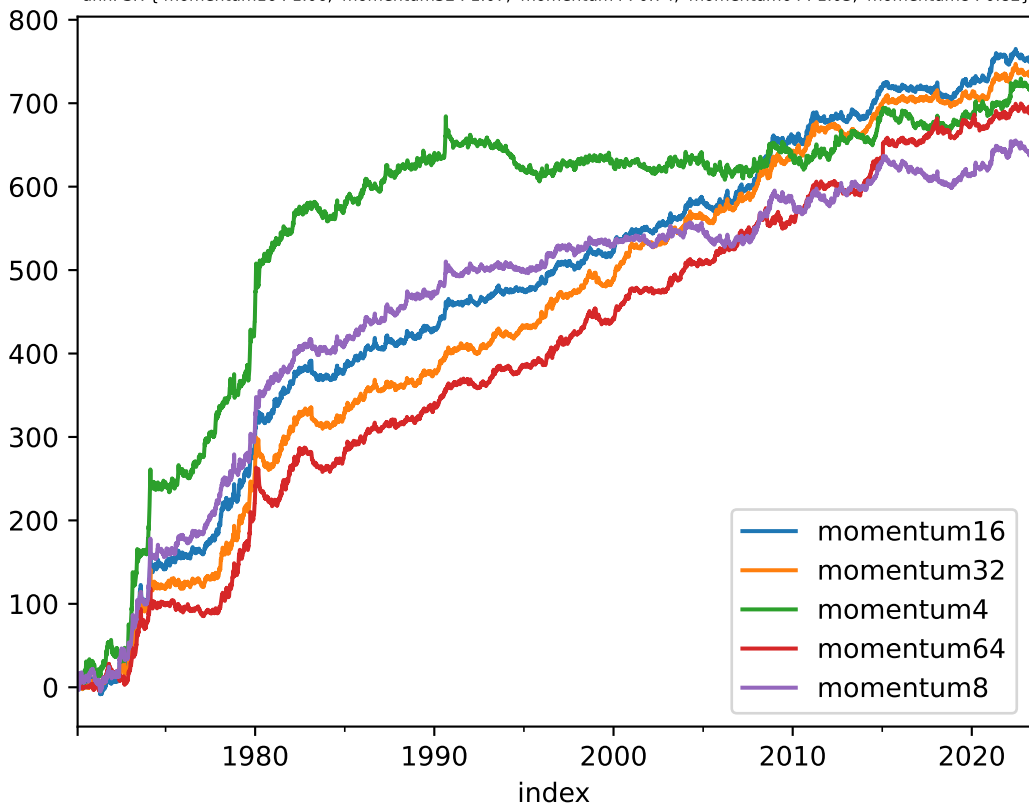


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.841, 'momentum32': 13.555, 'momentum4': 13.237, 'momentum64': 12.724, 'momentum8': 11.768}

ann. std {'momentum16': 13.052, 'momentum32': 12.615, 'momentum4': 17.9, 'momentum64': 12.336, 'momentum8': 14.337}

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

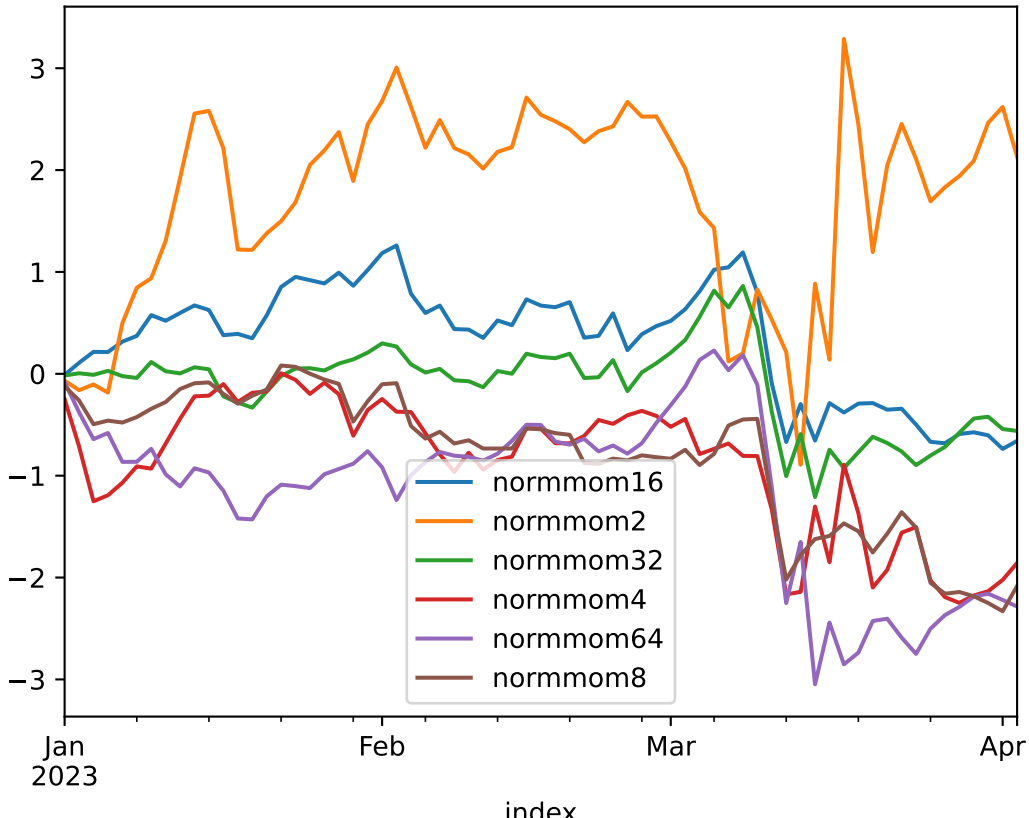


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -2.514, 'normmom2': 8.139, 'normmom32': -2.143, 'normmom4': -7.096, 'normmom64': -8.729, 'normmom8': -7.962}

ann. std {'normmom16': 3.436, 'normmom2': 10.016, 'normmom32': 3.378, 'normmom4': 4.729, 'normmom64': 5.057, 'normmom8': 3.236}

ann. SR {'normmom16': -0.73, 'normmom2': 0.81, 'normmom32': -0.63, 'normmom4': -1.5, 'normmom64': -1.73, 'normmom8': -2.46}

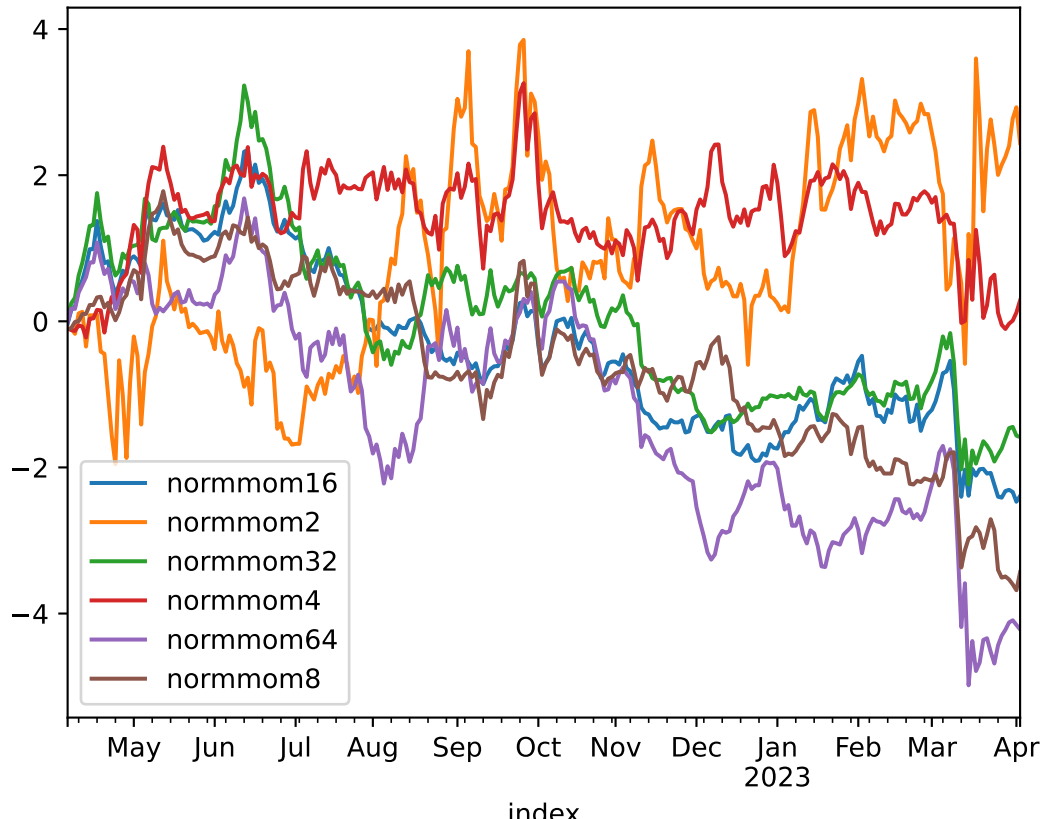


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.354, 'normmom2': 2.403, 'normmom32': -1.56, 'normmom4': 0.282, 'normmom64': -4.154, 'normmom8': -3.381}

ann. std {'normmom16': 2.715, 'normmom2': 7.855, 'normmom32': 3.043, 'normmom4': 4.34, 'normmom64': 3.869, 'normmom8': 2.954}

ann. SR {'normmom16': -0.87, 'normmom2': 0.31, 'normmom32': -0.51, 'normmom4': 0.06, 'normmom64': -1.07, 'normmom8': -1.14}

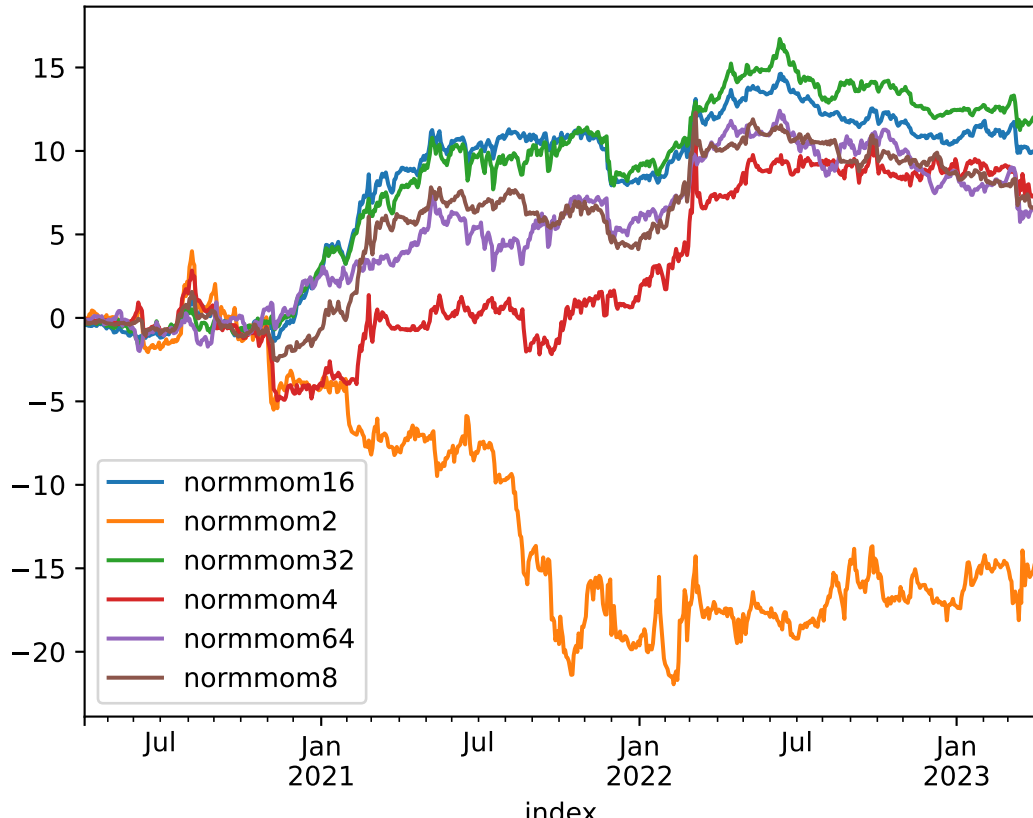


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.239, 'normmom2': -4.939, 'normmom32': 3.895, 'normmom4': 2.506, 'normmom64': 2.131, 'normmom8': 2.188}

ann. std {'normmom16': 3.511, 'normmom2': 8.61, 'normmom32': 3.881, 'normmom4': 5.346, 'normmom64': 4.274, 'normmom8': 3.916}

ann. SR {'normmom16': 0.92, 'normmom2': -0.57, 'normmom32': 1.0, 'normmom4': 0.47, 'normmom64': 0.5, 'normmom8': 0.56}

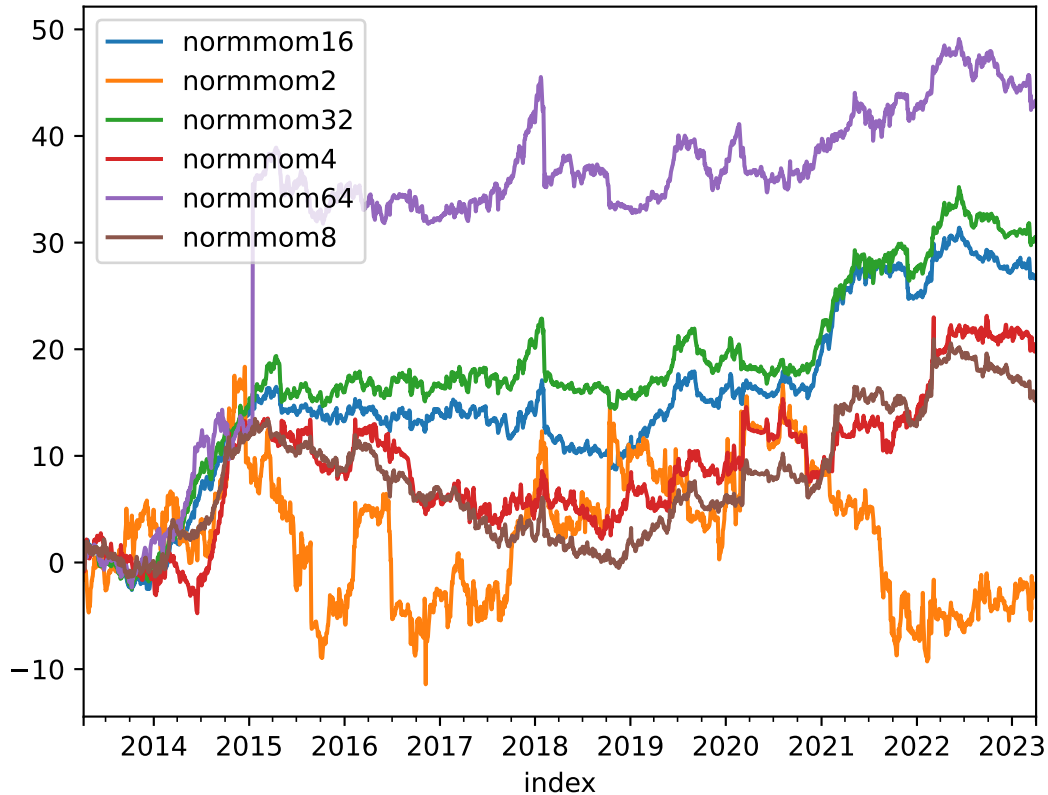


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.619, 'normmom2': -0.238, 'normmom32': 2.985, 'normmom4': 1.98, 'normmom64': 4.242, 'normmom8': 1.507}

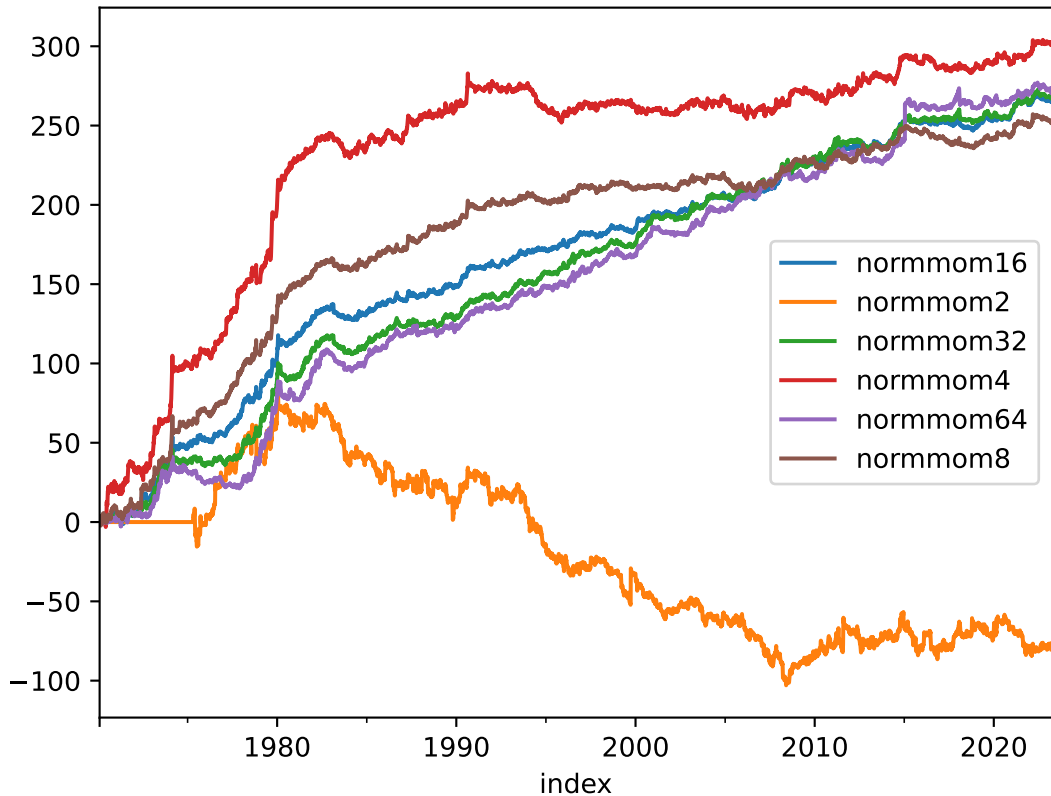
ann. std {'normmom16': 3.489, 'normmom2': 10.34, 'normmom32': 3.632, 'normmom4': 5.47, 'normmom64': 8.274, 'normmom8': 3.911}

ann. SR {'normmom16': 0.75, 'normmom2': -0.02, 'normmom32': 0.82, 'normmom4': 0.36, 'normmom64': 0.51, 'normmom8': 0.39}



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

ann. mean {'normmom16': 4.888, 'normmom2': -1.43, 'normmom32': 4.94, 'normmom4': 5.556, 'normmom64': 5.005, 'normmom8': 4.643}
ann. std {'normmom16': 4.534, 'normmom2': 11.616, 'normmom32': 4.612, 'normmom4': 7.387, 'normmom64': 5.873, 'normmom8': 5.367}
ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

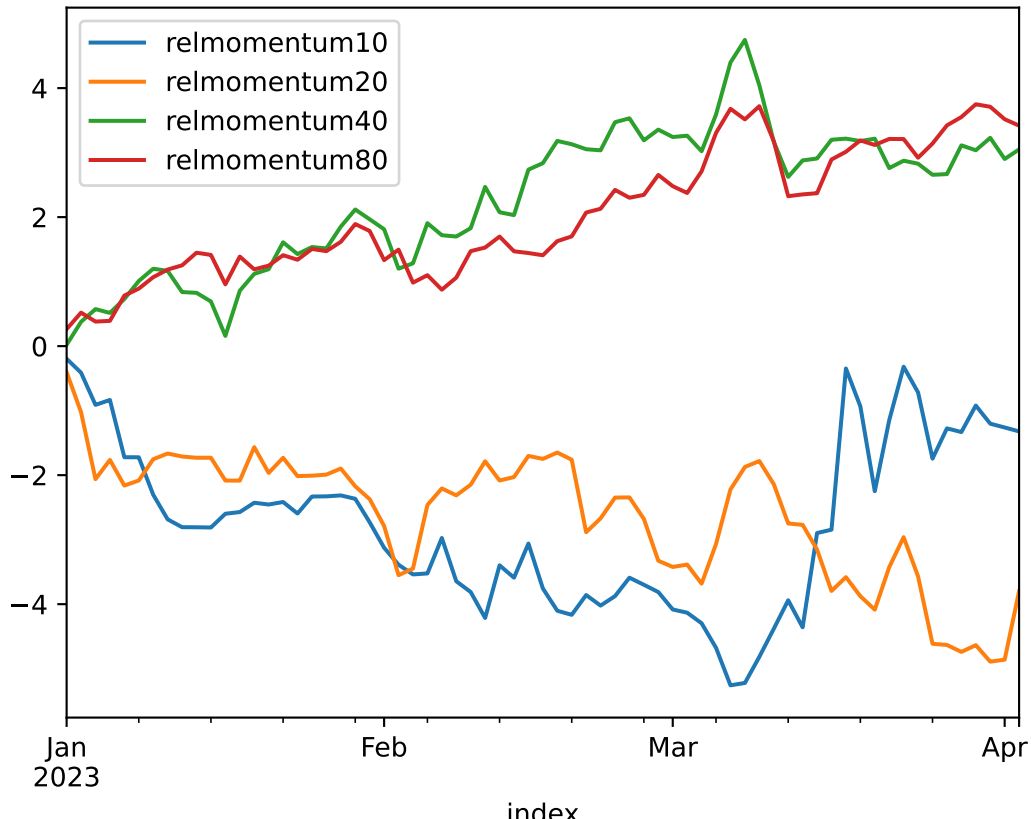


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -5.05, 'relmomentum20': -14.513, 'relmomentum40': 11.651, 'relmomentum80': 13.06}

ann. std {'relmomentum10': 8.872, 'relmomentum20': 6.996, 'relmomentum40': 5.387, 'relmomentum80': 4.162}

ann. SR {'relmomentum10': -0.57, 'relmomentum20': -2.07, 'relmomentum40': 2.16, 'relmomentum80': 3.14}

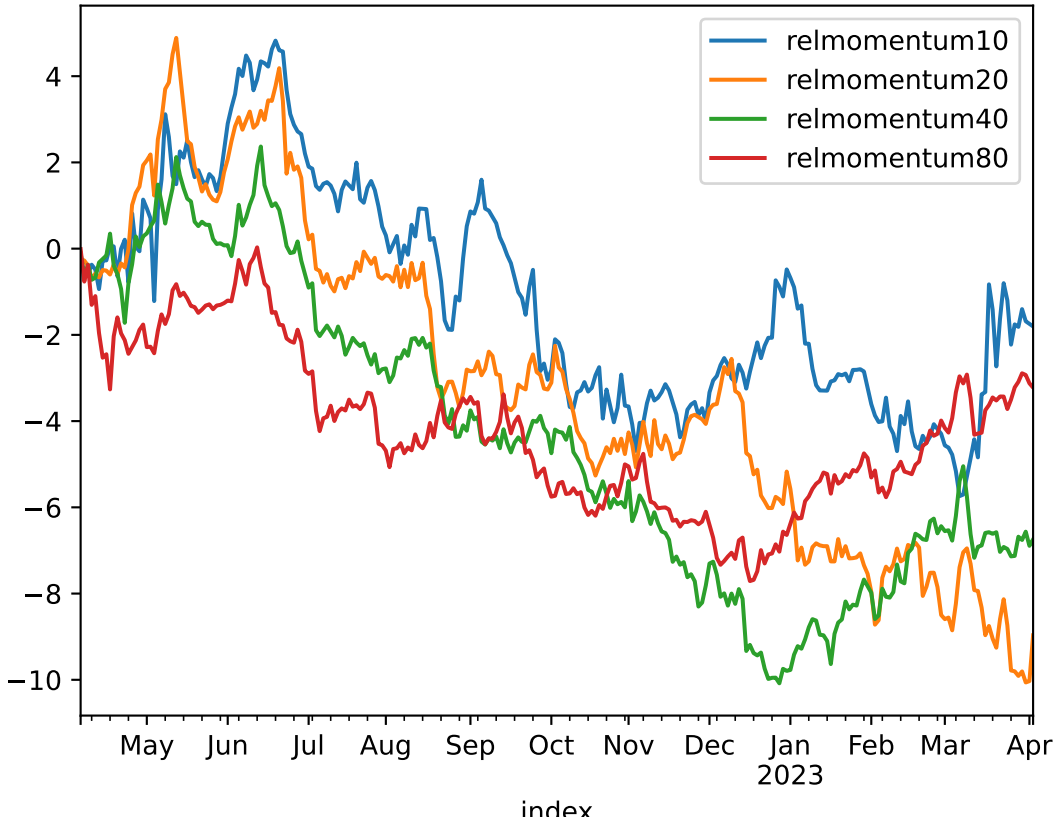


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.776, 'relmomentum20': -8.83, 'relmomentum40': -6.64, 'relmomentum80': -3.173}

ann. std {'relmomentum10': 8.346, 'relmomentum20': 6.671, 'relmomentum40': 5.491, 'relmomentum80': 4.932}

ann. SR {'relmomentum10': -0.21, 'relmomentum20': -1.32, 'relmomentum40': -1.21, 'relmomentum80': -0.64}

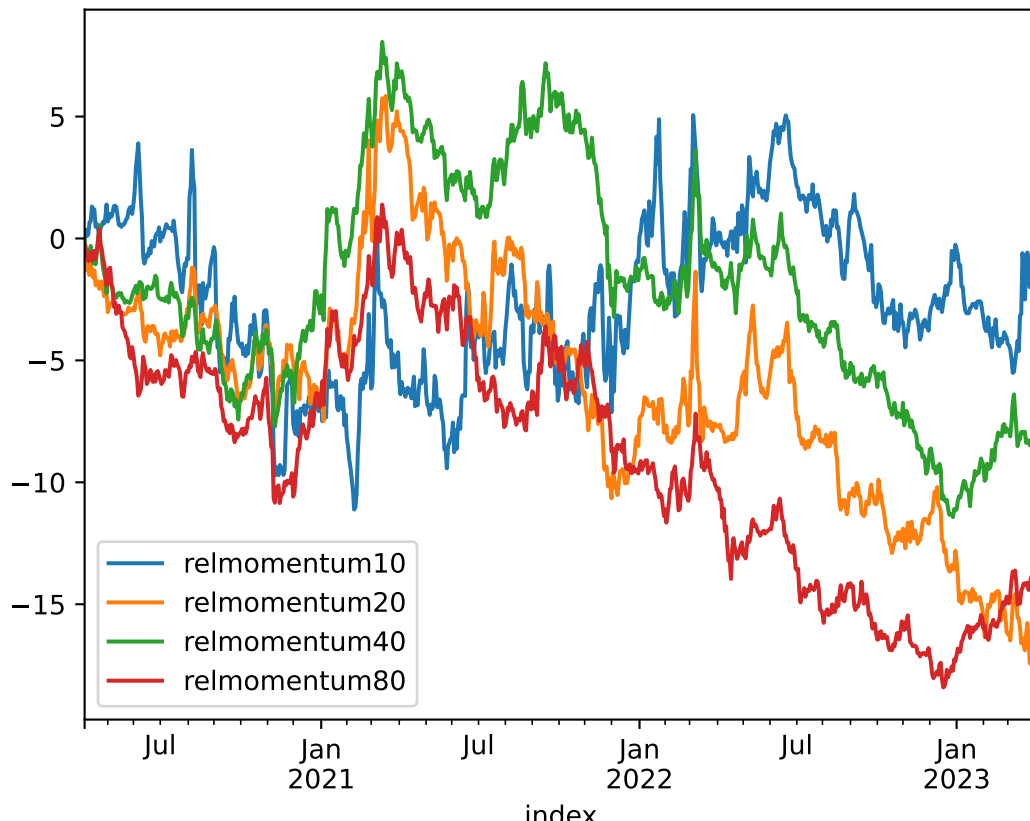


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.516, 'relmomentum20': -5.436, 'relmomentum40': -2.649, 'relmomentum80': -4.557}

ann. std {'relmomentum10': 11.926, 'relmomentum20': 8.357, 'relmomentum40': 6.973, 'relmomentum80': 6.346}

ann. SR {'relmomentum10': -0.04, 'relmomentum20': -0.65, 'relmomentum40': -0.38, 'relmomentum80': -0.72}

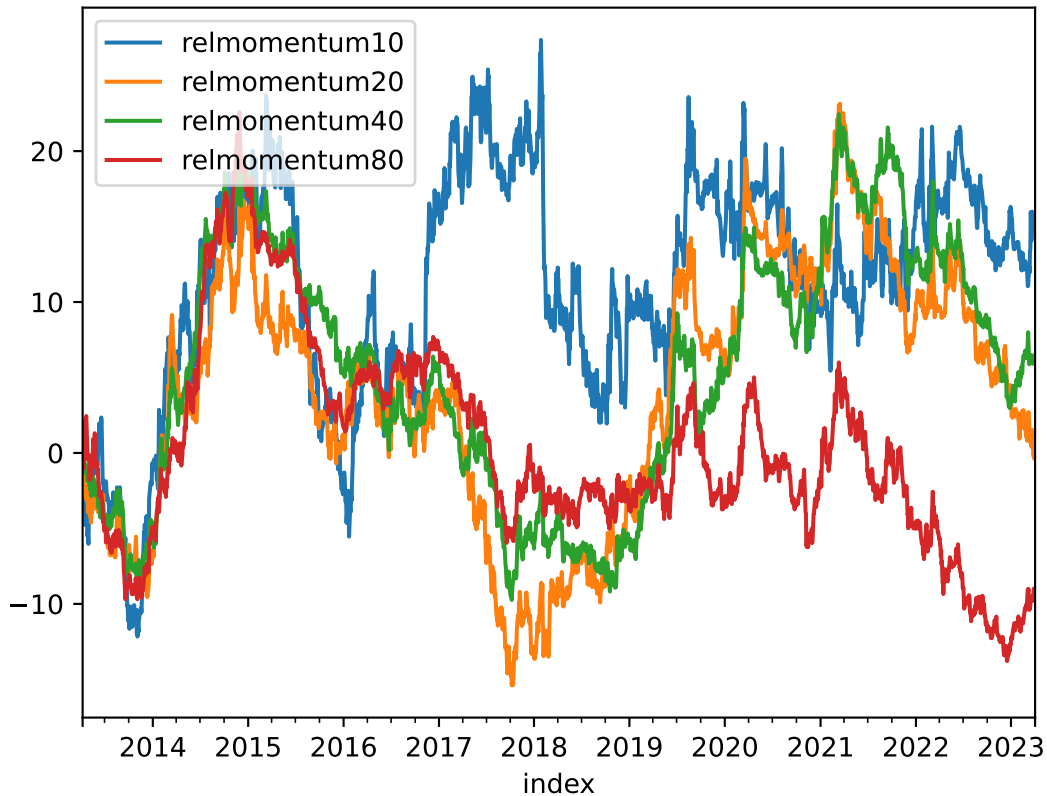


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.472, 'relmomentum20': 0.068, 'relmomentum40': 0.619, 'relmomentum80': -0.914}

ann. std {'relmomentum10': 13.481, 'relmomentum20': 8.626, 'relmomentum40': 7.031, 'relmomentum80': 6.447}

ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.01, 'relmomentum40': 0.09, 'relmomentum80': -0.14}

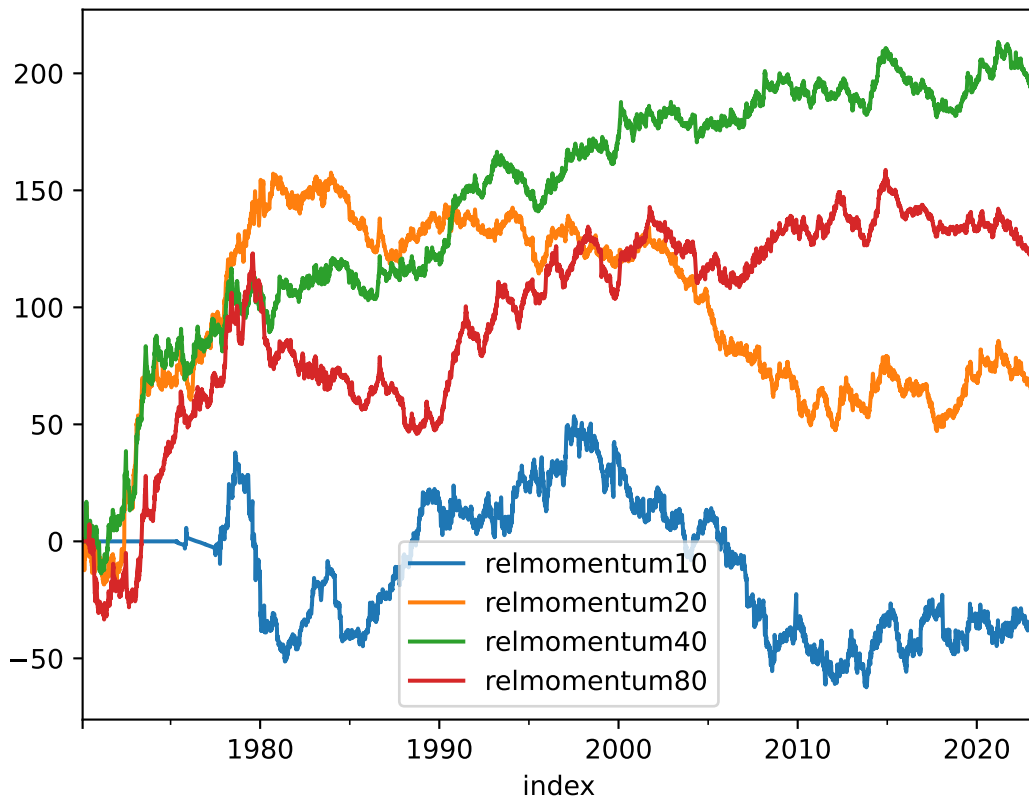


Total Trading Rule P&L for period '99Y'

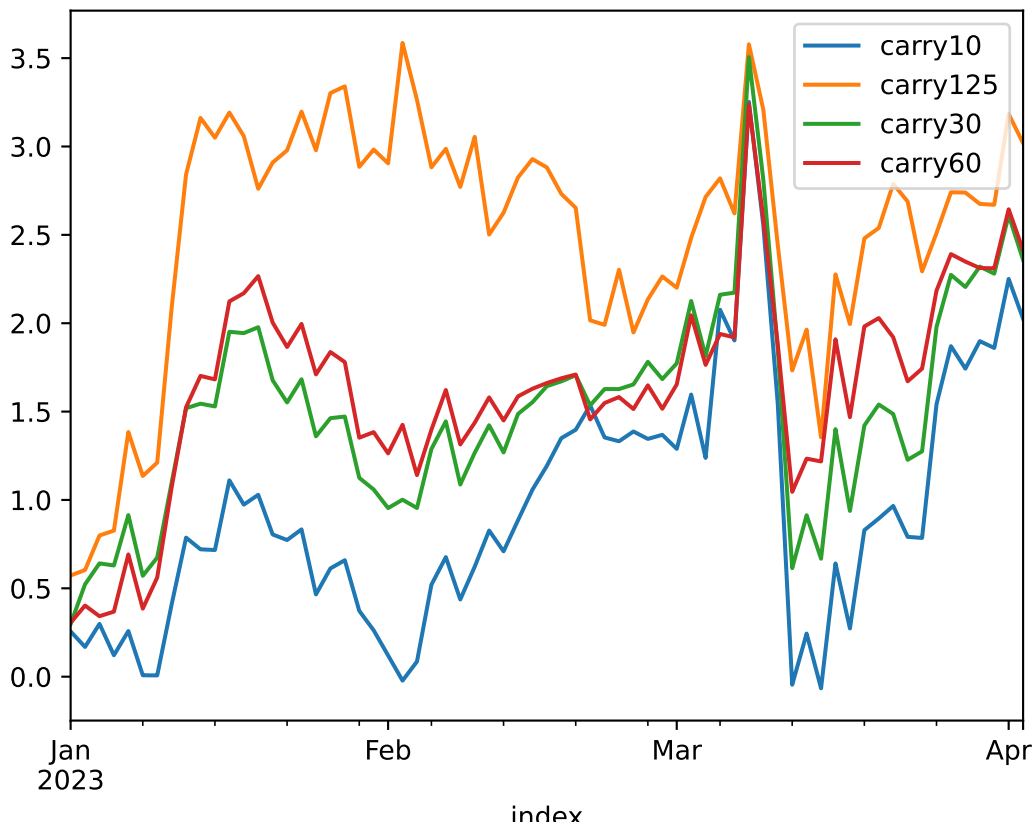
ann. mean {'relmomentum10': -0.65, 'relmomentum20': 1.167, 'relmomentum40': 3.641, 'relmomentum80': 2.341}

ann. std {'relmomentum10': 13.398, 'relmomentum20': 10.473, 'relmomentum40': 9.642, 'relmomentum80': 9.787}

ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}

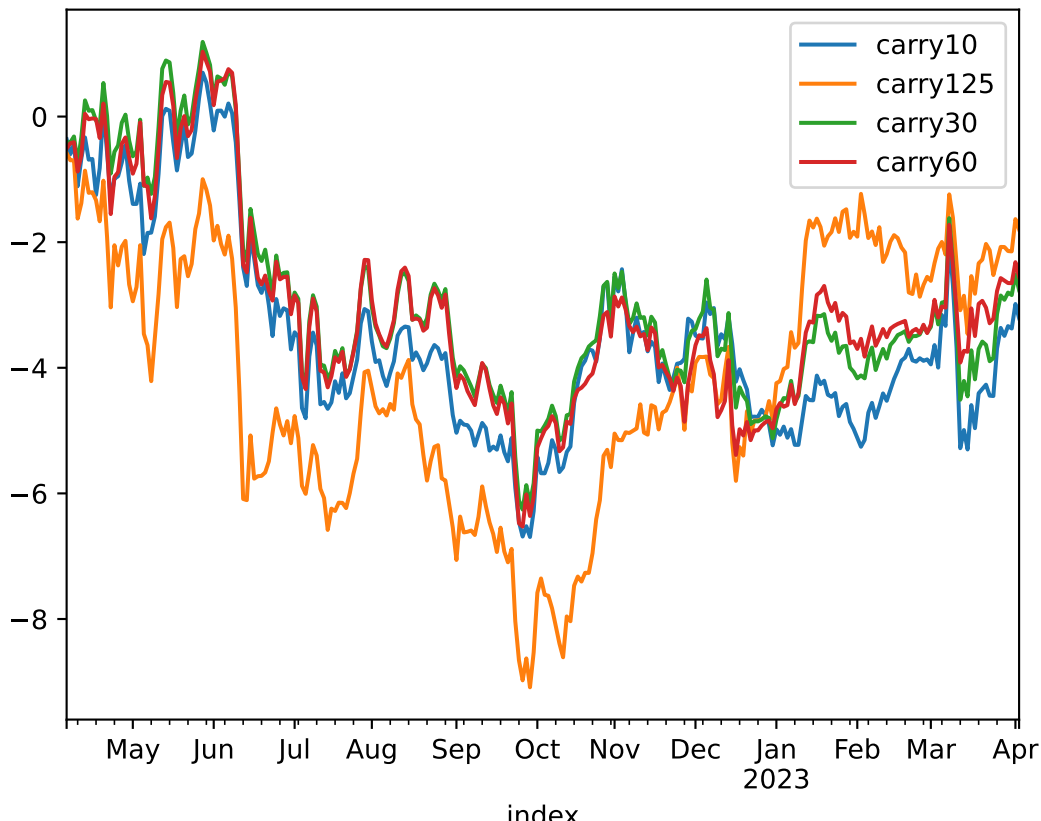


Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 7.737, 'carry125': 11.535, 'carry30': 9.01, 'carry60': 9.22}
ann. std {'carry10': 6.359, 'carry125': 5.948, 'carry30': 5.818, 'carry60': 5.2}
ann. SR {'carry10': 1.22, 'carry125': 1.94, 'carry30': 1.55, 'carry60': 1.77}



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

ann. mean	{'carry10': -3.161, 'carry125': -1.77, 'carry30': -2.722, 'carry60': -2.511}
ann. std	{'carry10': 6.322, 'carry125': 7.059, 'carry30': 6.222, 'carry60': 6.246}
ann. SR	{'carry10': -0.5, 'carry125': -0.25, 'carry30': -0.44, 'carry60': -0.4}

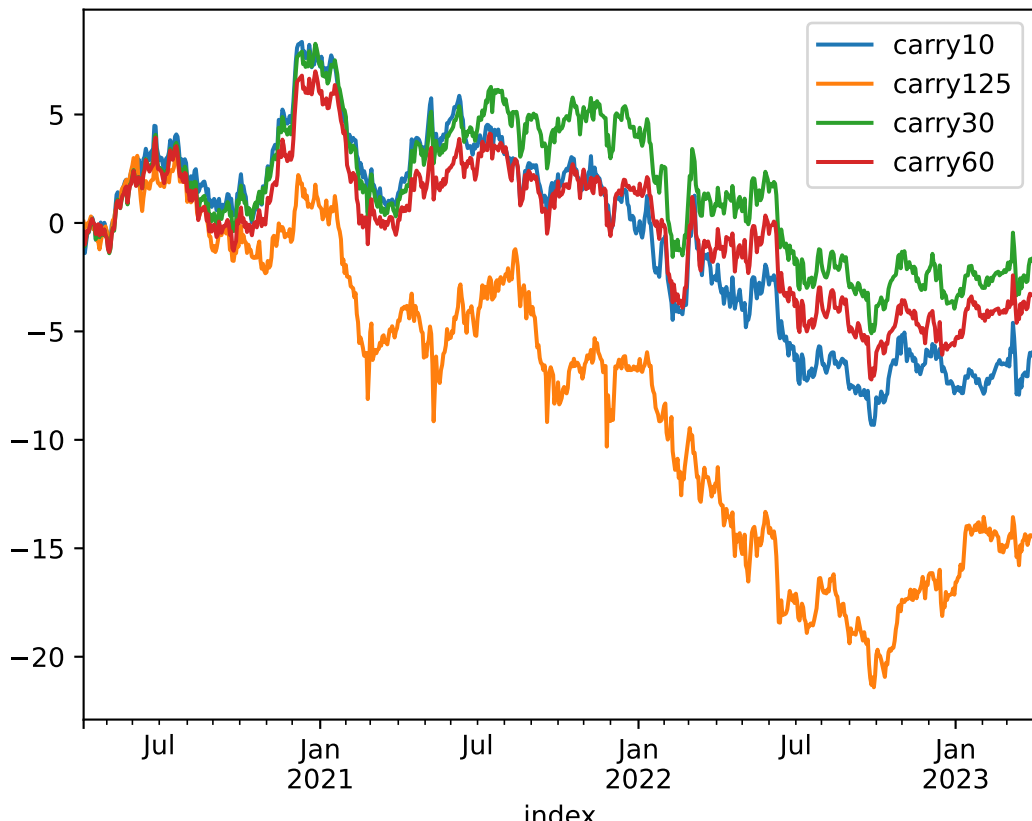


Total Trading Rule P&L for period '3Y'

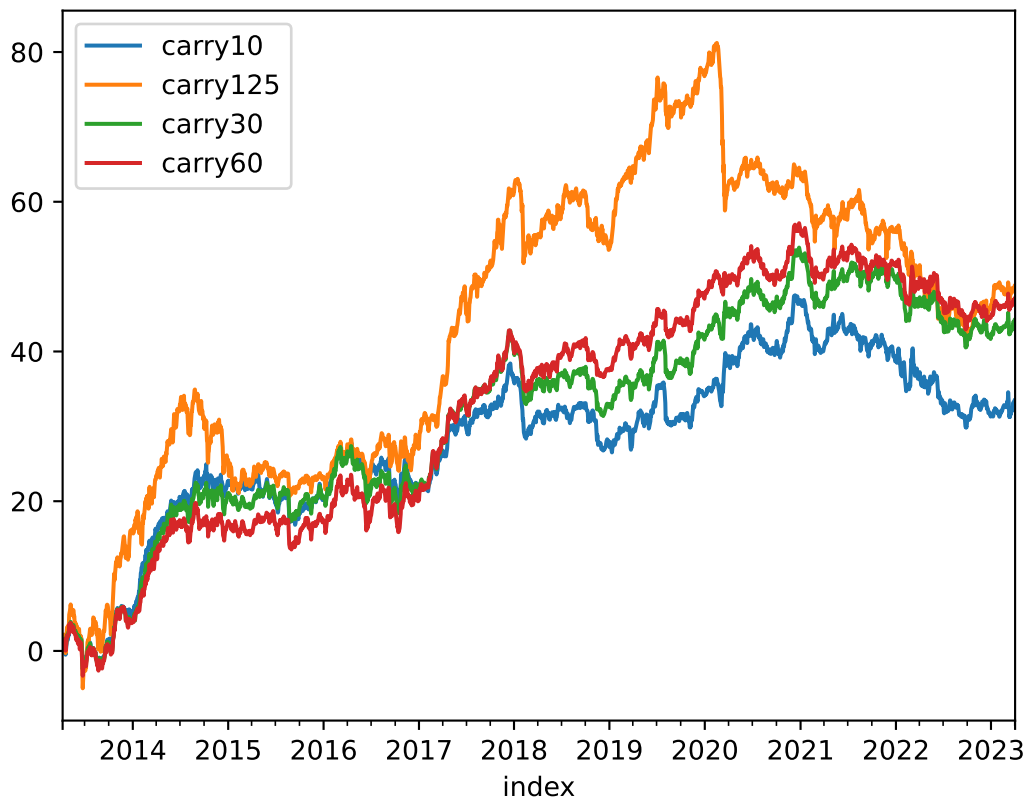
ann. mean {'carry10': -1.909, 'carry125': -4.622, 'carry30': -0.522, 'carry60': -1.061}

ann. std {'carry10': 6.605, 'carry125': 8.0, 'carry30': 6.516, 'carry60': 6.494}

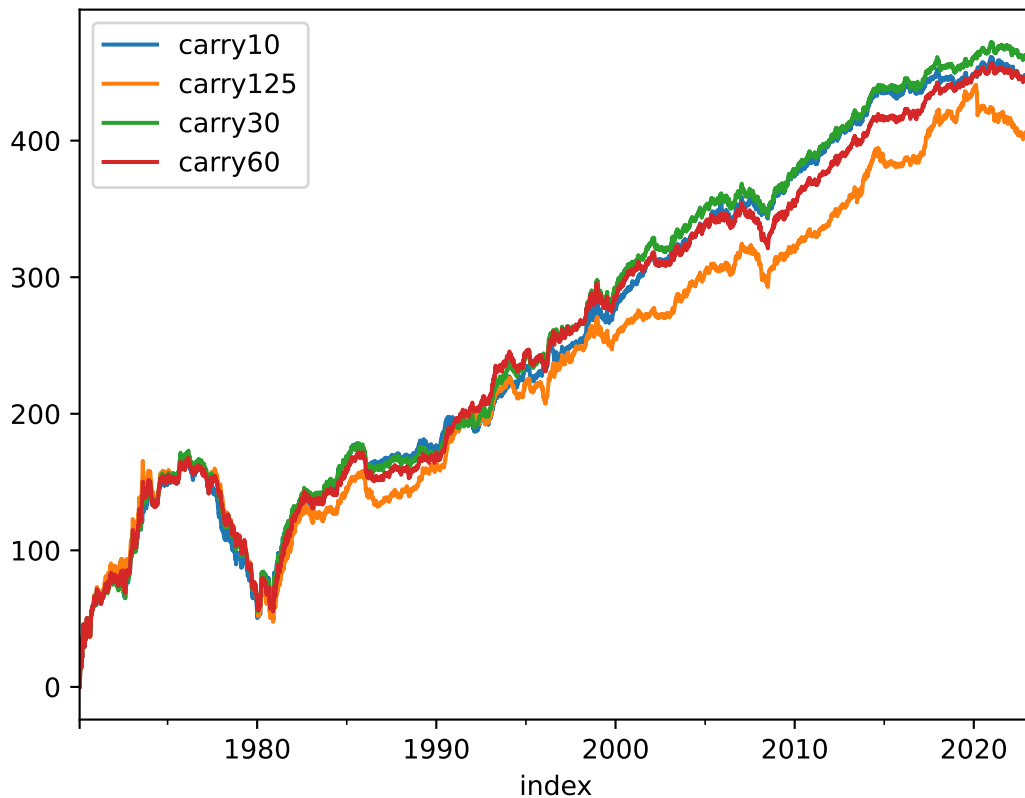
ann. SR {'carry10': -0.29, 'carry125': -0.58, 'carry30': -0.08, 'carry60': -0.16}



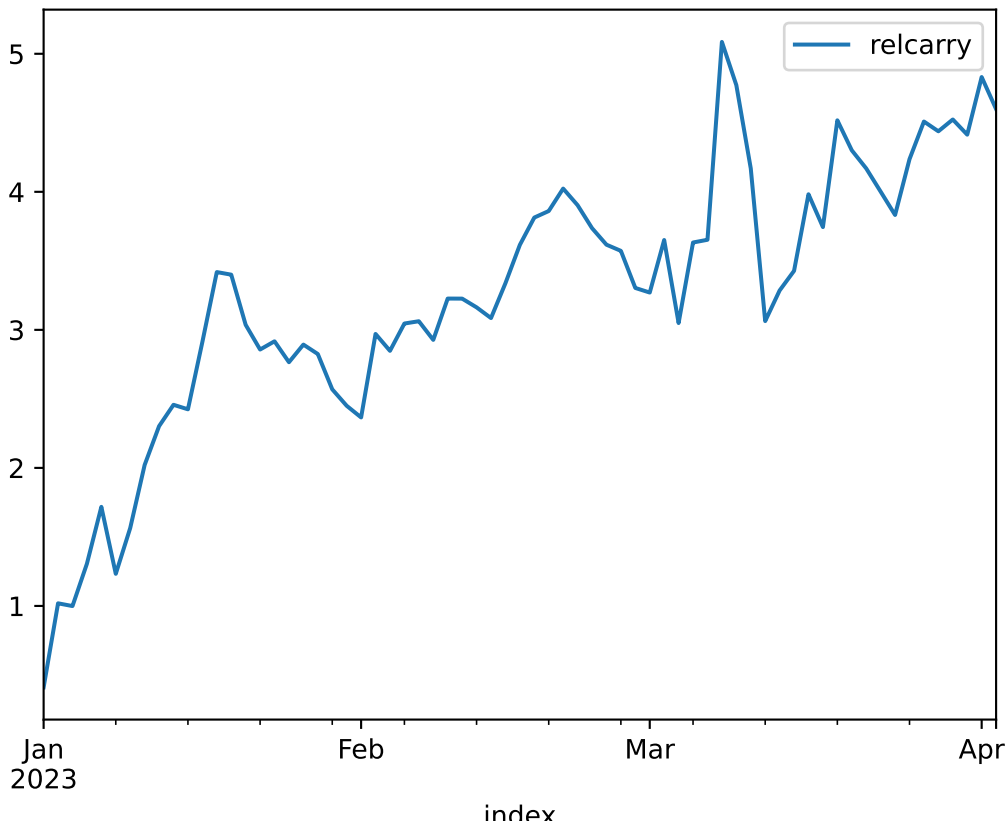
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.273, 'carry125': 4.78, 'carry30': 4.323, 'carry60': 4.606}
ann. std {'carry10': 6.391, 'carry125': 8.998, 'carry30': 6.479, 'carry60': 6.432}
ann. SR {'carry10': 0.51, 'carry125': 0.53, 'carry30': 0.67, 'carry60': 0.72}



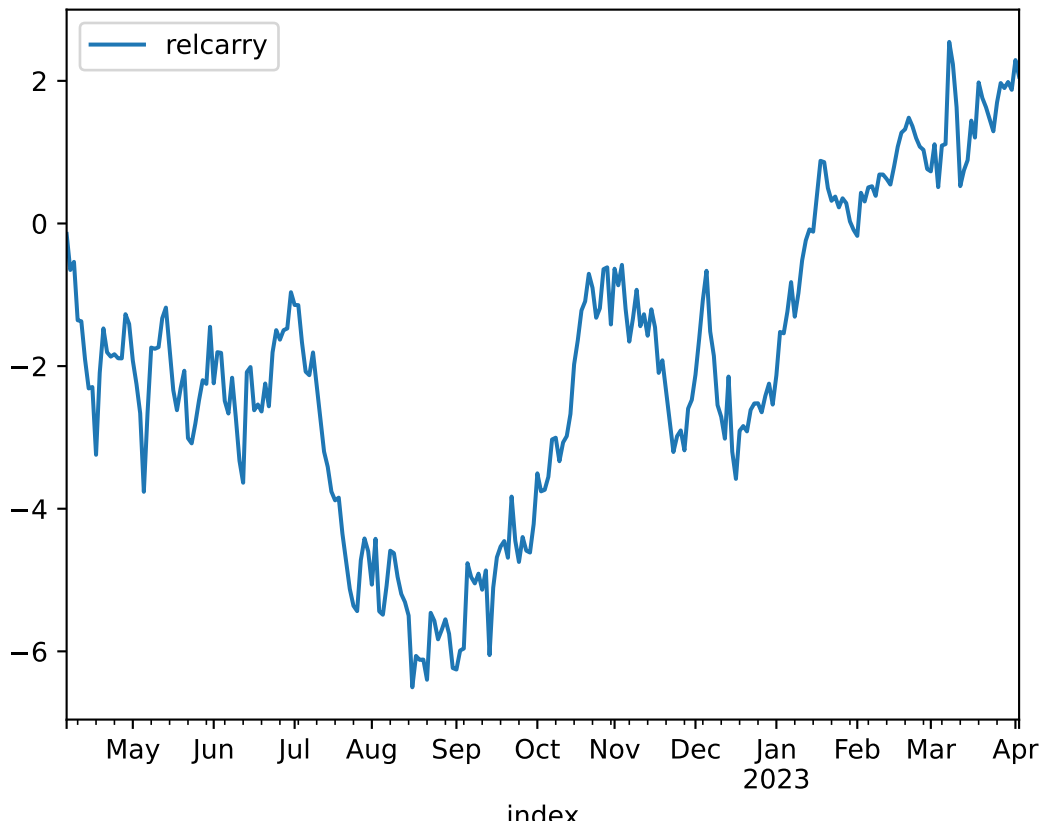
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.253, 'carry125': 7.537, 'carry30': 8.534, 'carry60': 8.245}
ann. std {'carry10': 11.204, 'carry125': 11.562, 'carry30': 11.261, 'carry60': 11.264}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



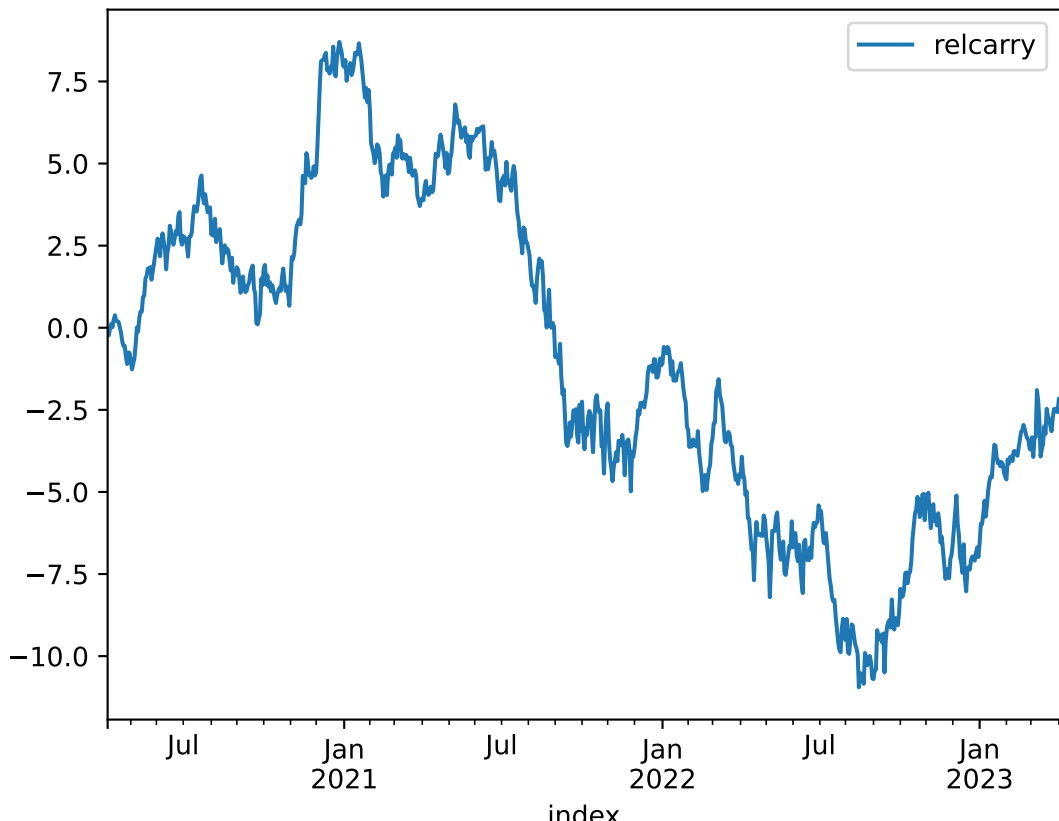
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 17.574}
ann. std {'relcarry': 5.925}
ann. SR {'relcarry': 2.97}



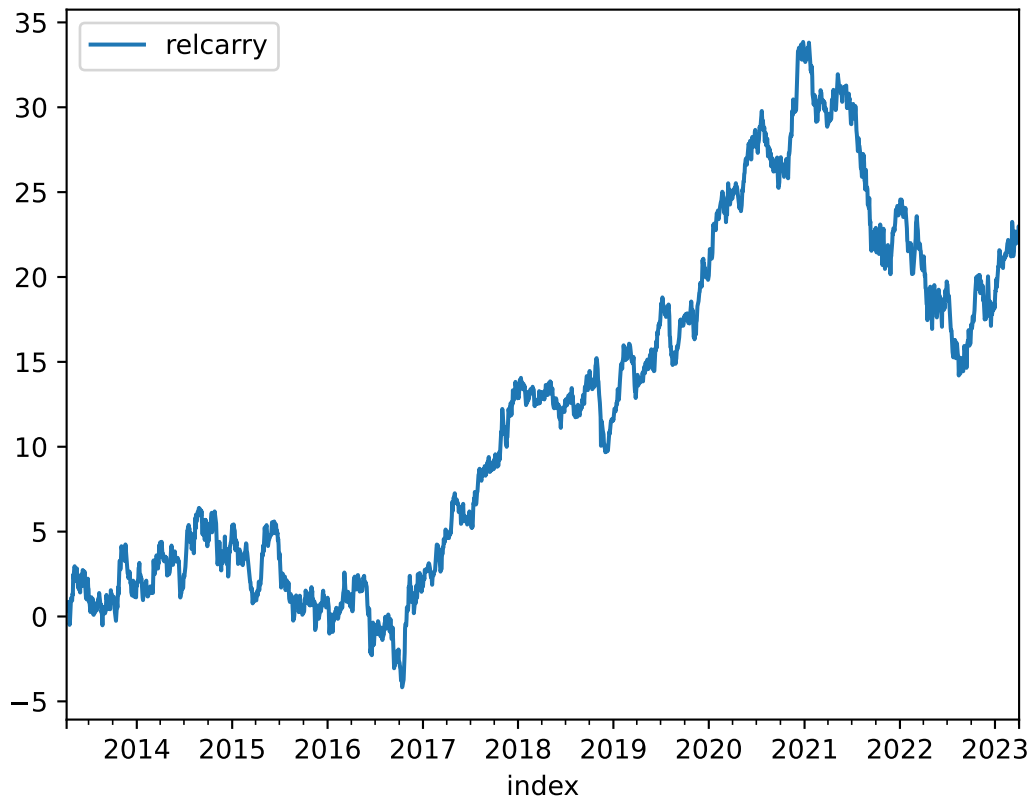
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 2.028}
ann. std {'relcarry': 7.187}
ann. SR {'relcarry': 0.28}



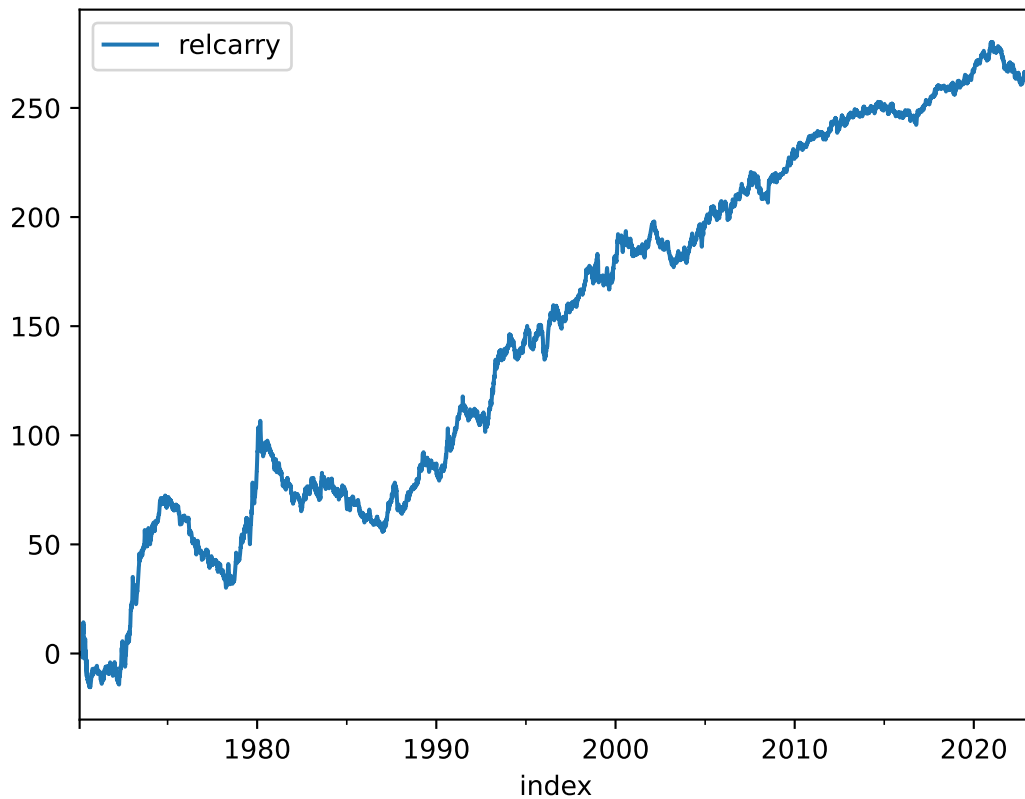
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.781}
ann. std {'relcarry': 6.642}
ann. SR {'relcarry': -0.12}



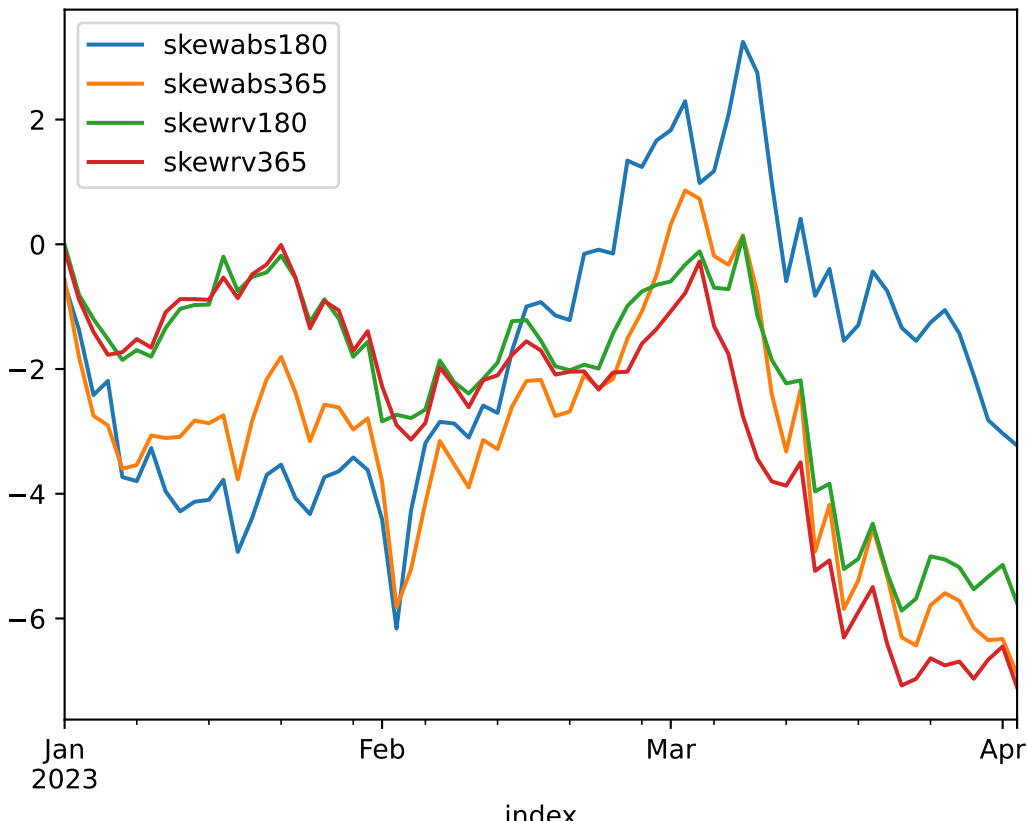
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.235}
ann. std {'relcarry': 5.838}
ann. SR {'relcarry': 0.38}



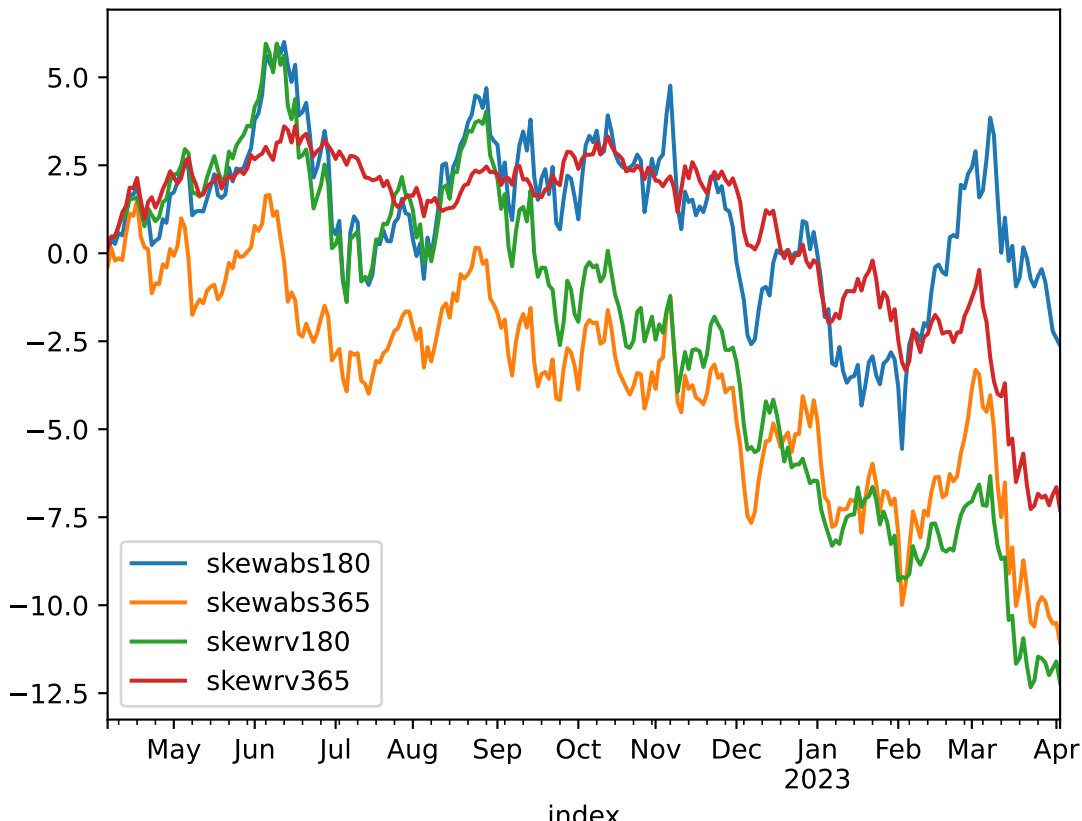
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.968}
ann. std {'relcarry': 8.961}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -12.327, 'skewabs365': -26.358, 'skewrv180': -21.983, 'skewrv365': -27.143}
ann. std {'skewabs180': 12.285, 'skewabs365': 12.225, 'skewrv180': 8.351, 'skewrv365': 8.009}
ann. SR {'skewabs180': -1.0, 'skewabs365': -2.16, 'skewrv180': -2.63, 'skewrv365': -3.39}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -2.581, 'skewabs365': -10.904, 'skewrv180': -12.023, 'skewrv365': -7.187}
ann. std {'skewabs180': 11.041, 'skewabs365': 9.899, 'skewrv180': 9.188, 'skewrv365': 5.588}
ann. SR {'skewabs180': -0.23, 'skewabs365': -1.1, 'skewrv180': -1.31, 'skewrv365': -1.29}

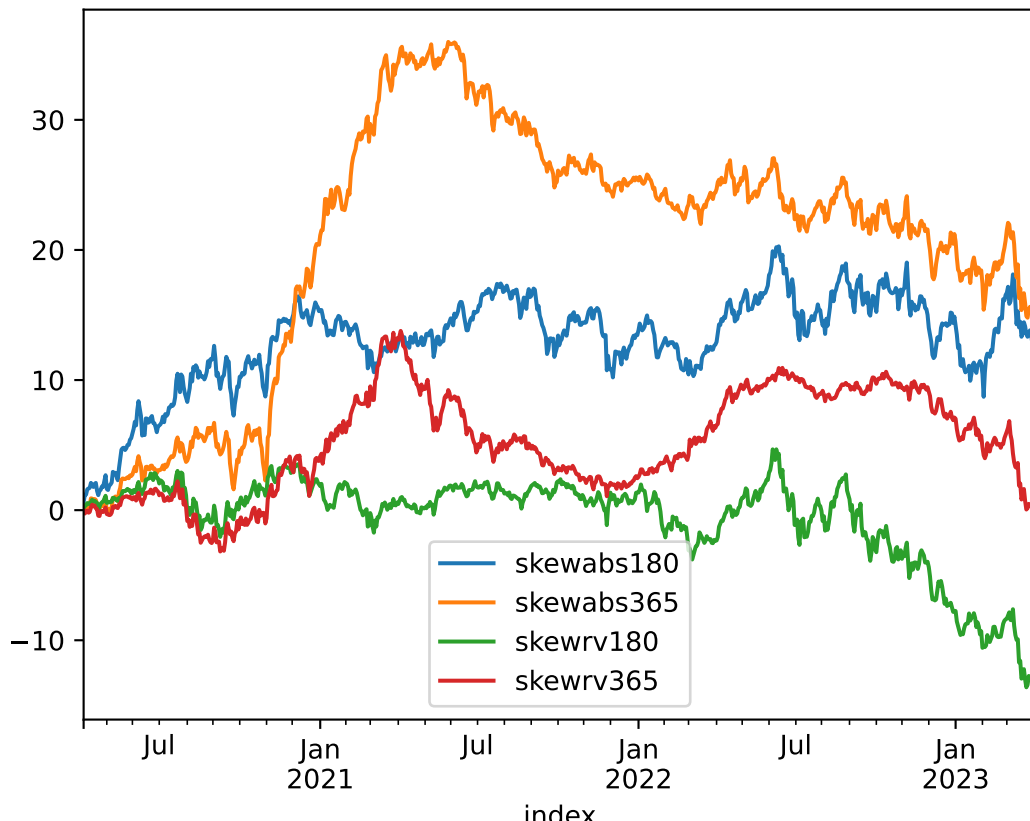


Total Trading Rule P&L for period '3Y'

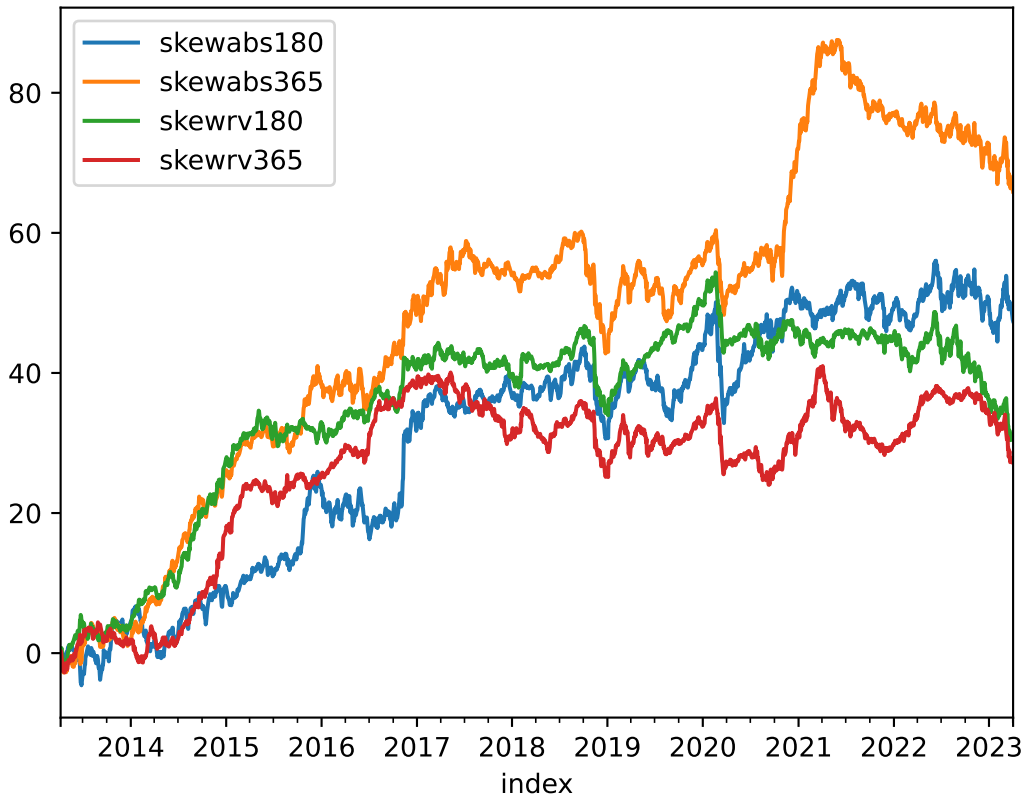
ann. mean {'skewabs180': 3.814, 'skewabs365': 4.69, 'skewrv180': -4.418, 'skewrv365': 0.006}

ann. std {'skewabs180': 9.113, 'skewabs365': 8.831, 'skewrv180': 7.178, 'skewrv365': 6.258}

ann. SR {'skewabs180': 0.42, 'skewabs365': 0.53, 'skewrv180': -0.62, 'skewrv365': 0.0}

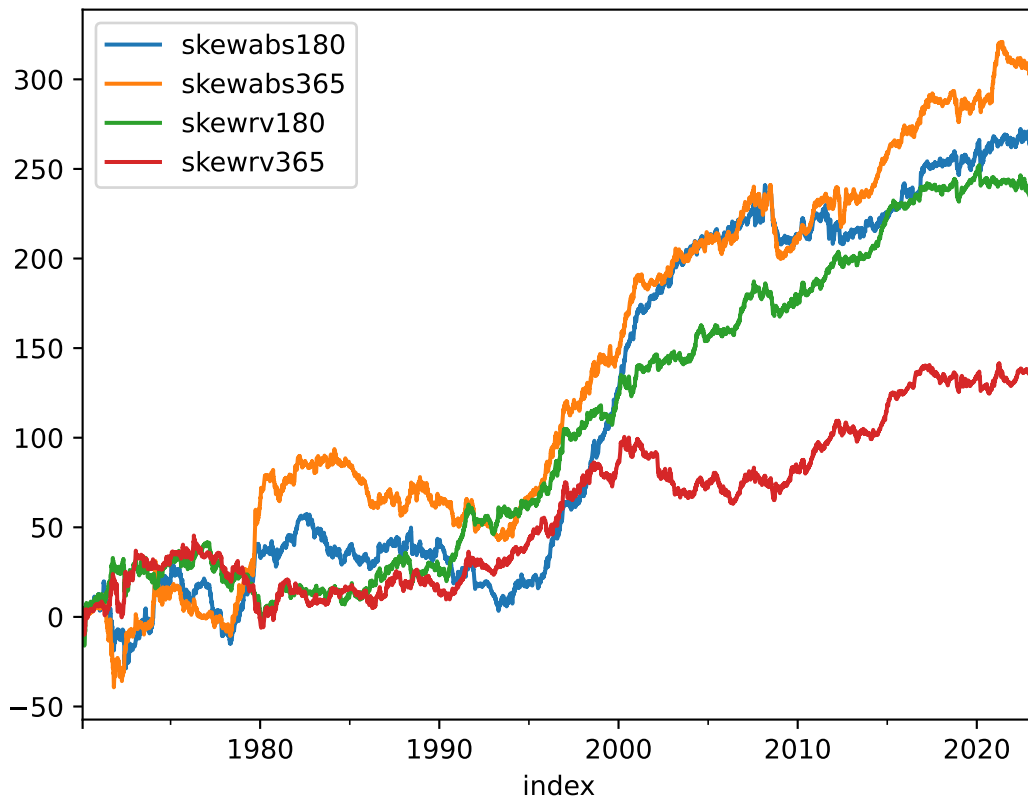


Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.655, 'skewabs365': 6.47, 'skewrv180': 2.998, 'skewrv365': 2.674}
ann. std {'skewabs180': 8.003, 'skewabs365': 7.954, 'skewrv180': 6.385, 'skewrv365': 6.053}
ann. SR {'skewabs180': 0.58, 'skewabs365': 0.81, 'skewrv180': 0.47, 'skewrv365': 0.44}

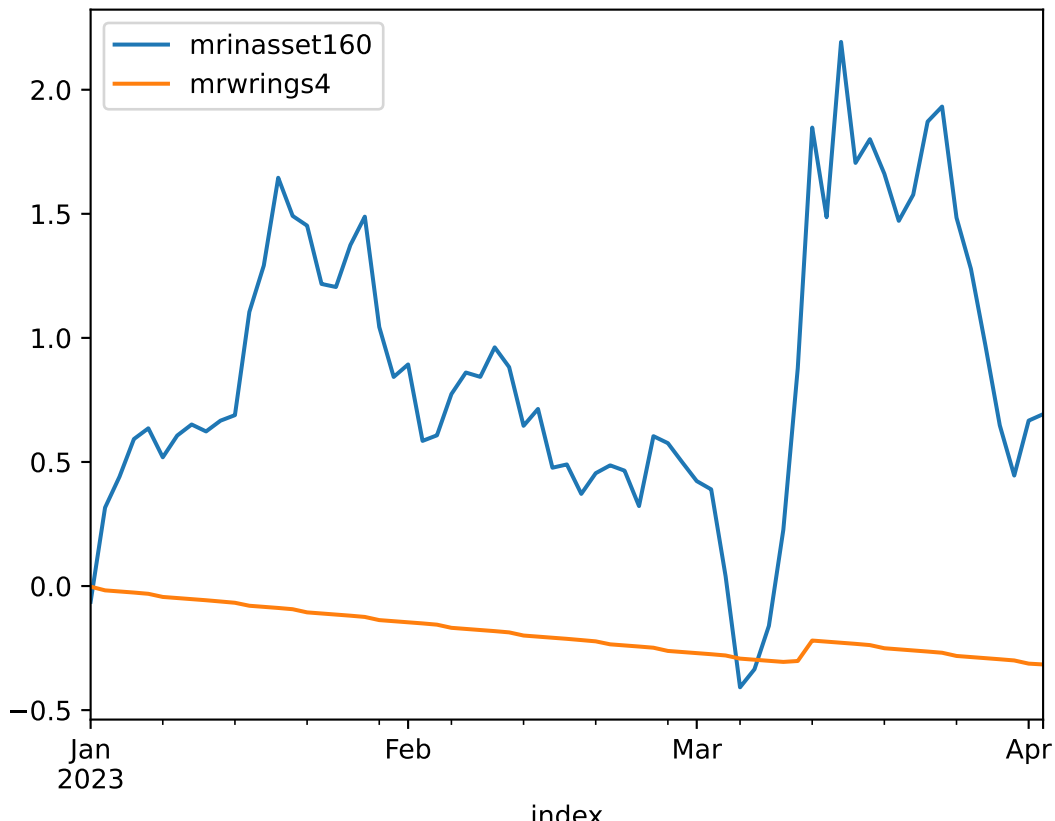


Total Trading Rule P&L for period '99Y'

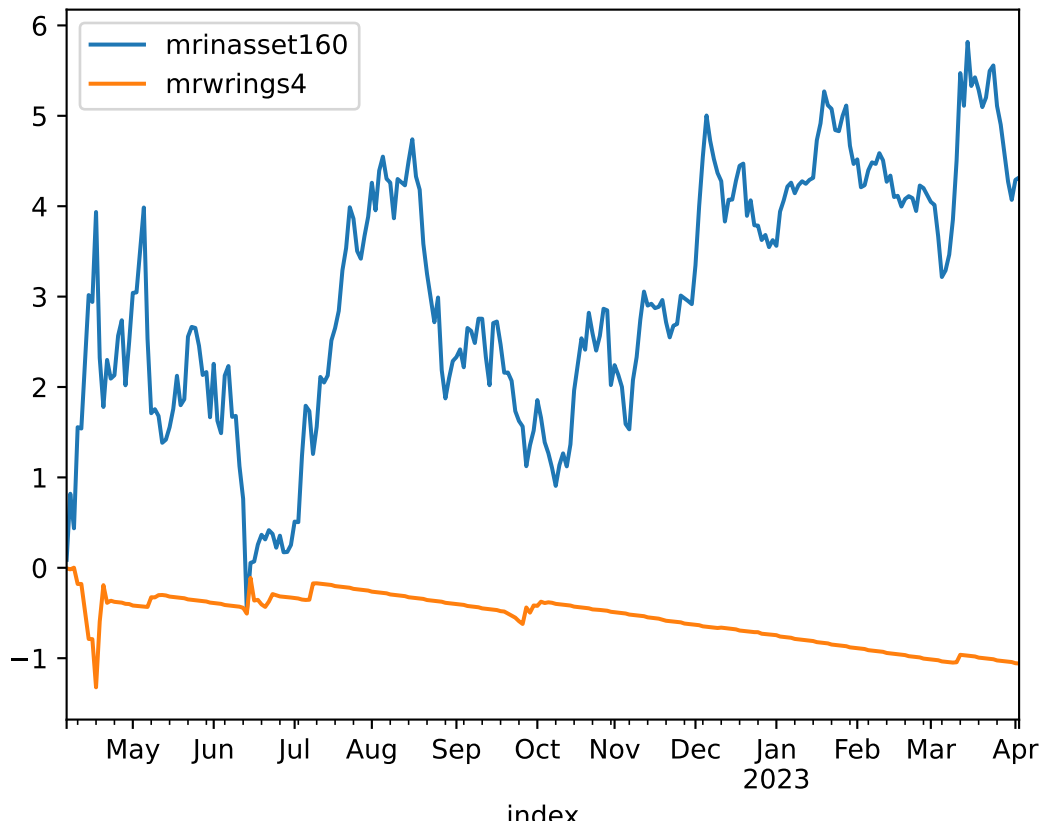
ann. mean	{'skewabs180': 4.864, 'skewabs365': 5.522, 'skewrv180': 4.213, 'skewrv365': 2.358}
ann. std	{'skewabs180': 10.102, 'skewabs365': 9.868, 'skewrv180': 8.752, 'skewrv365': 8.122}
ann. SR	{'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



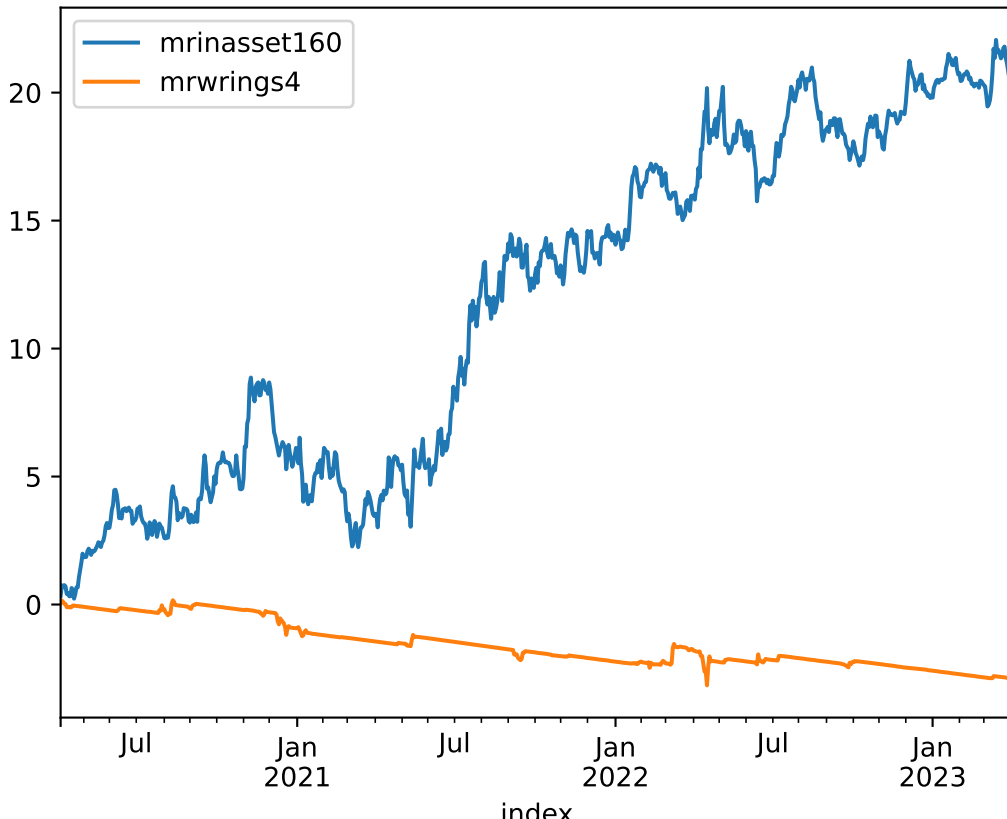
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 2.646, 'mrwrings4': -1.207}
ann. std {'mrinasset160': 4.291, 'mrwrings4': 0.182}
ann. SR {'mrinasset160': 0.62, 'mrwrings4': -6.64}



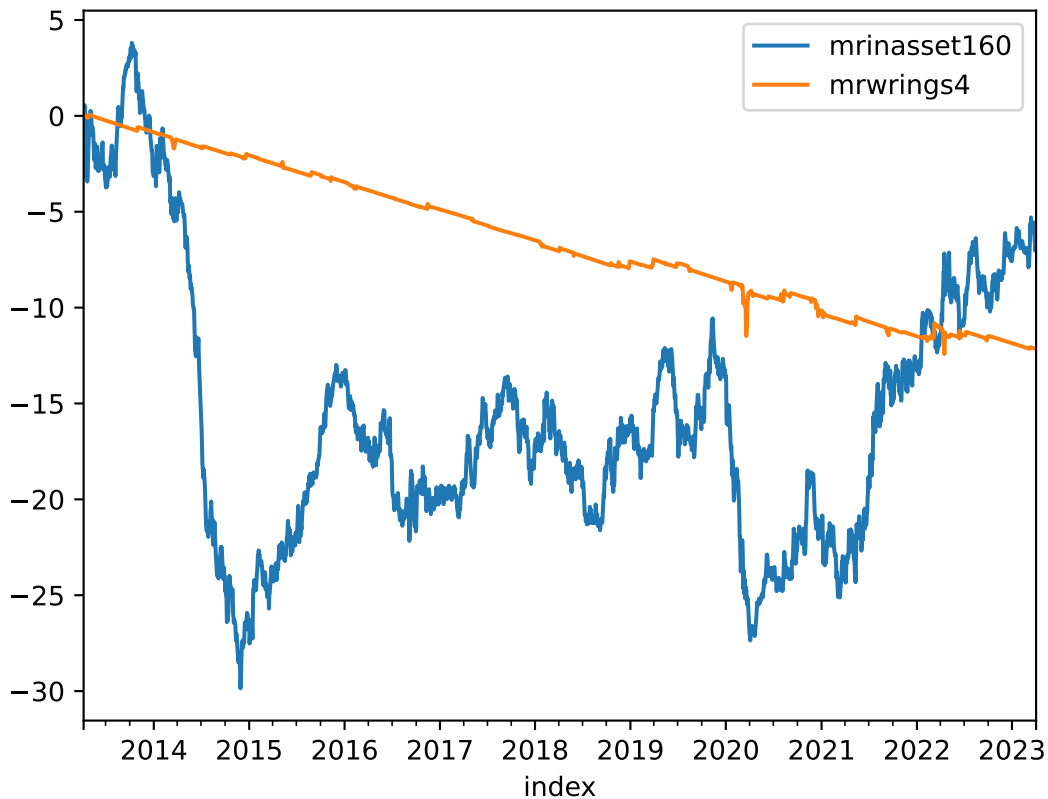
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 4.251, 'mrwrings4': -1.043}
ann. std {'mrinasset160': 5.774, 'mrwrings4': 1.248}
ann. SR {'mrinasset160': 0.74, 'mrwrings4': -0.84}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.73, 'mrwrings4': -0.947}
ann. std {'mrinasset160': 6.255, 'mrwrings4': 1.023}
ann. SR {'mrinasset160': 1.08, 'mrwrings4': -0.93}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.668, 'mrwrings4': -1.194}
ann. std {'mrinasset160': 6.308, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.11, 'mrwrings4': -1.36}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.553, 'mrwrings4': -2.118}
ann. std {'mrinasset160': 9.872, 'mrwrings4': 2.089}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.01}

