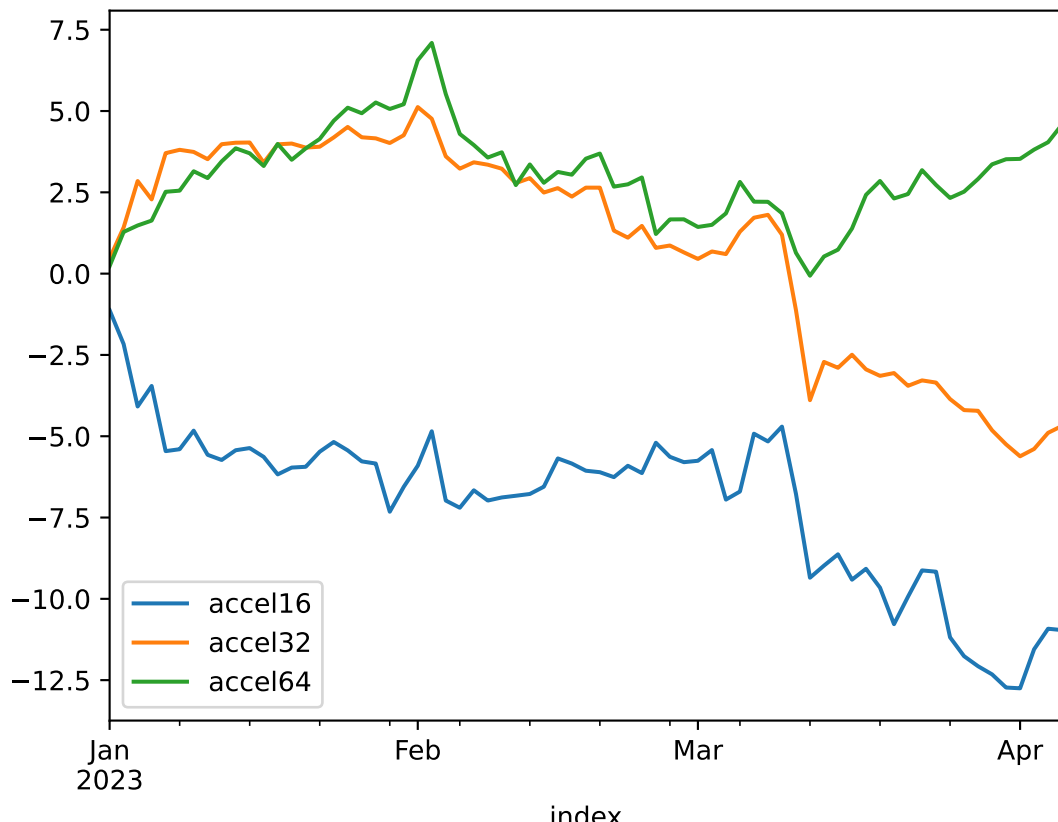
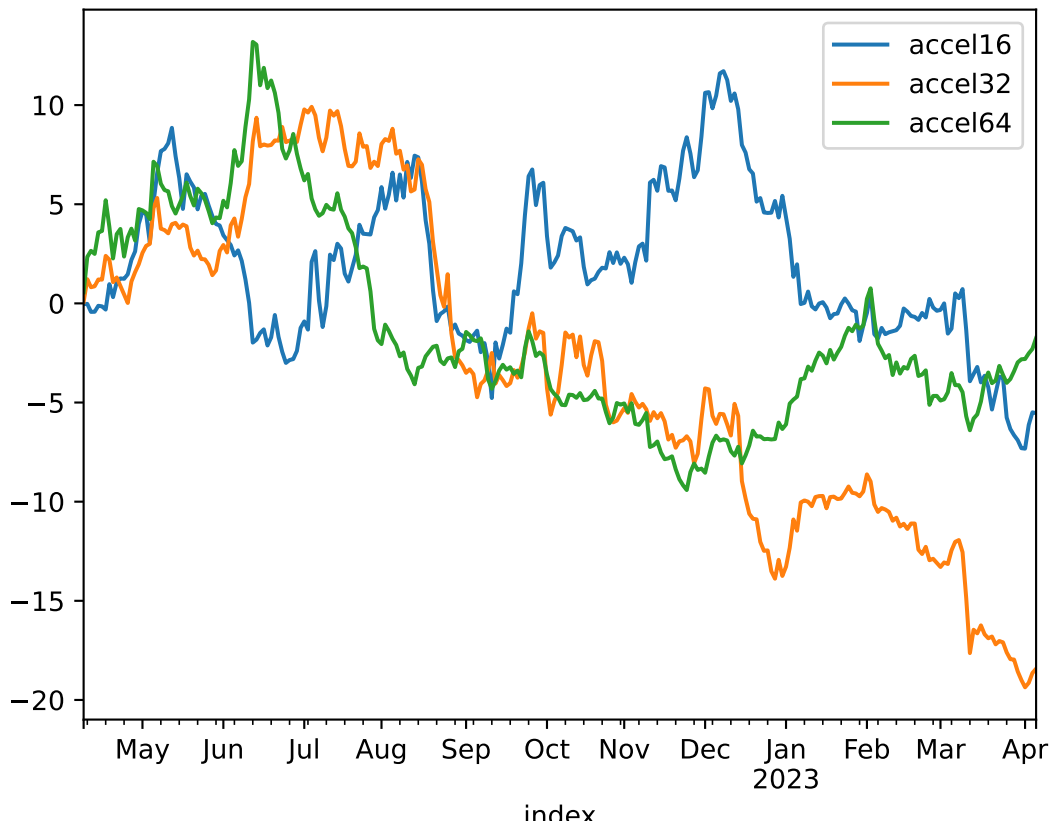


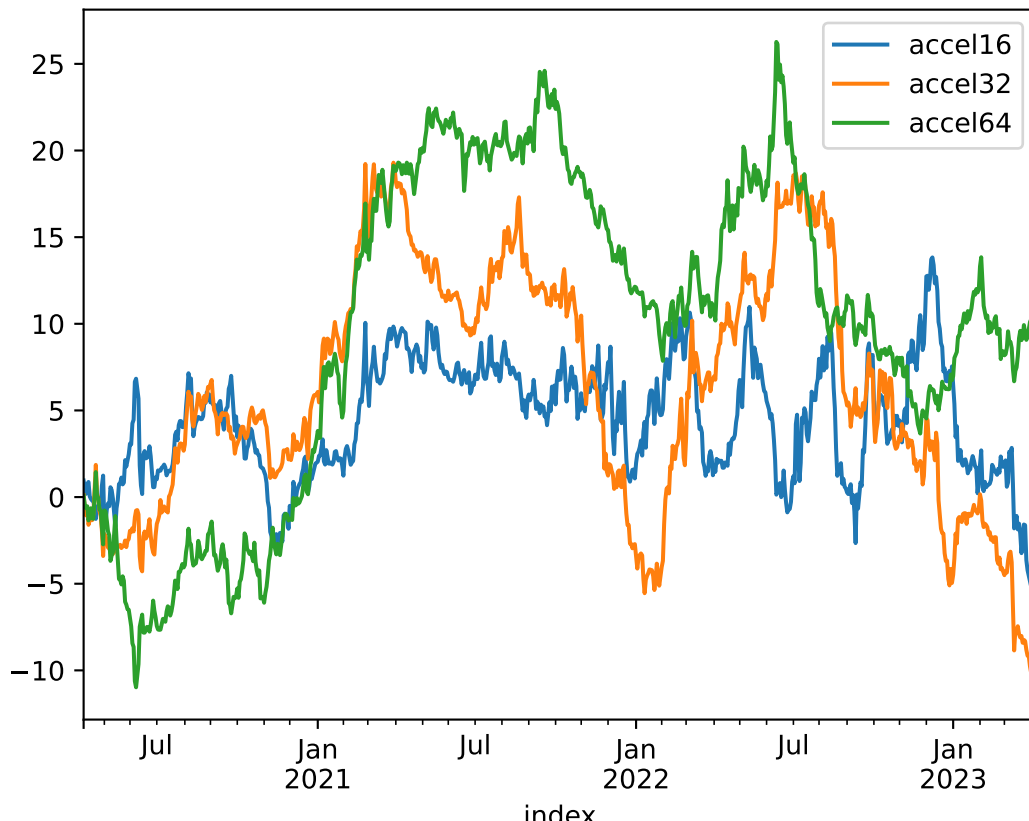
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -40.668, 'accel32': -17.371, 'accel64': 17.018}
ann. std {'accel16': 13.645, 'accel32': 10.554, 'accel64': 9.667}
ann. SR {'accel16': -2.98, 'accel32': -1.65, 'accel64': 1.76}



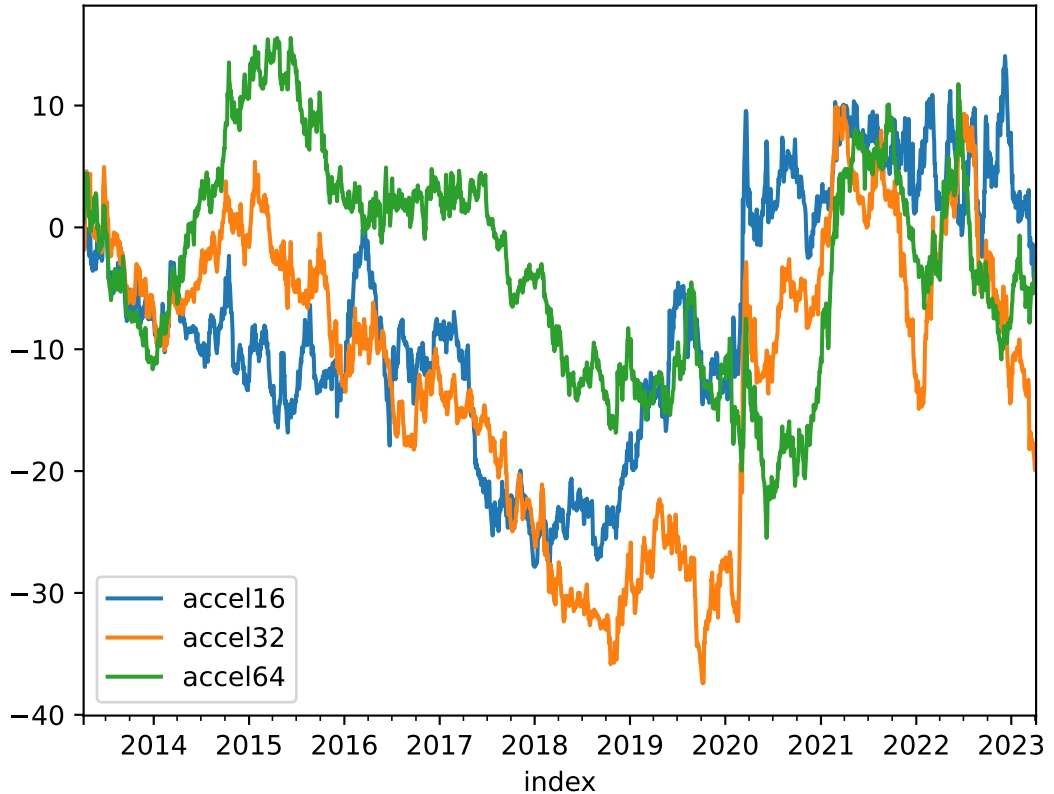
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -5.451, 'accel32': -18.144, 'accel64': -1.722}
ann. std {'accel16': 16.039, 'accel32': 13.148, 'accel64': 11.355}
ann. SR {'accel16': -0.34, 'accel32': -1.38, 'accel64': -0.15}



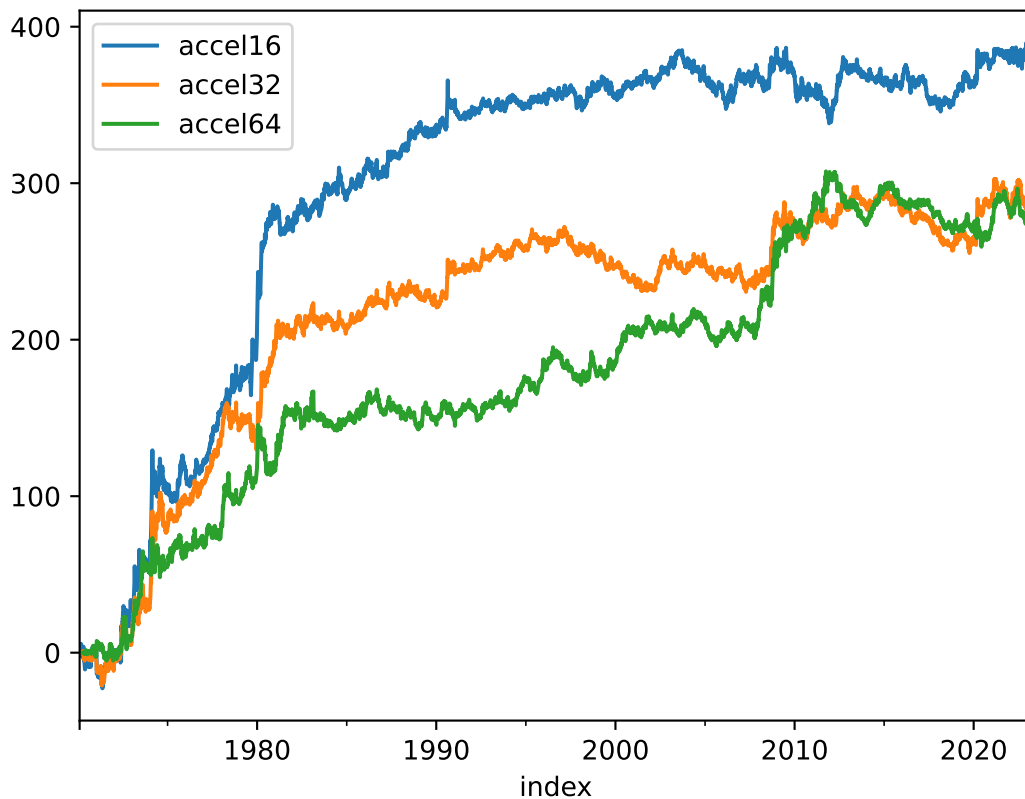
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -1.119, 'accel32': -3.156, 'accel64': 3.71}
ann. std {'accel16': 13.636, 'accel32': 11.871, 'accel64': 10.682}
ann. SR {'accel16': -0.08, 'accel32': -0.27, 'accel64': 0.35}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.313, 'accel32': -1.864, 'accel64': -0.311}
ann. std {'accel16': 11.709, 'accel32': 10.74, 'accel64': 9.344}
ann. SR {'accel16': -0.03, 'accel32': -0.17, 'accel64': -0.03}

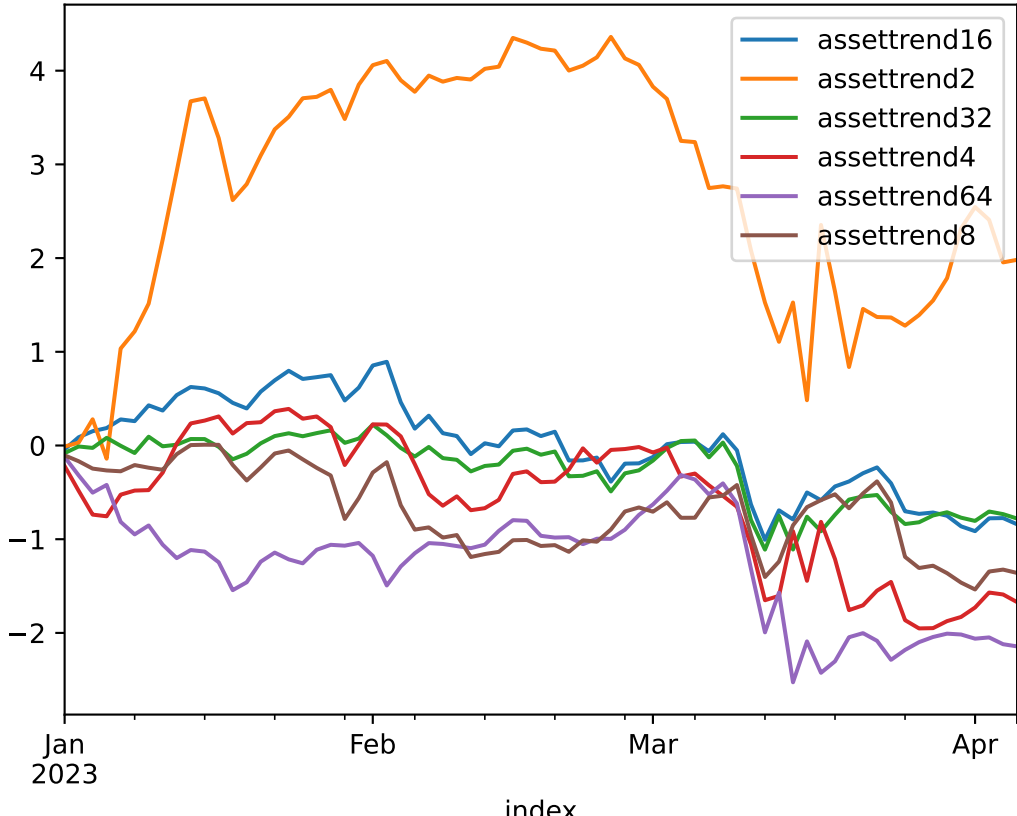


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.872, 'accel32': 5.053, 'accel64': 5.198}
ann. std {'accel16': 14.133, 'accel32': 12.457, 'accel64': 12.107}
ann. SR {'accel16': 0.49, 'accel32': 0.41, 'accel64': 0.43}



Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.12, 'assetrend2': 7.352, 'assetrend32': -2.893, 'assetrend4': -6.201, 'assetrend64': -7.954, 'assetrend8': -5.046}
 ann. std {'assetrend16': 2.669, 'assetrend2': 7.043, 'assetrend32': 2.424, 'assetrend4': 3.739, 'assetrend64': 3.597, 'assetrend8': 2.949}
 ann. SR {'assetrend16': -1.17, 'assetrend2': 1.04, 'assetrend32': -1.19, 'assetrend4': -1.66, 'assetrend64': -2.21, 'assetrend8': -1.71}

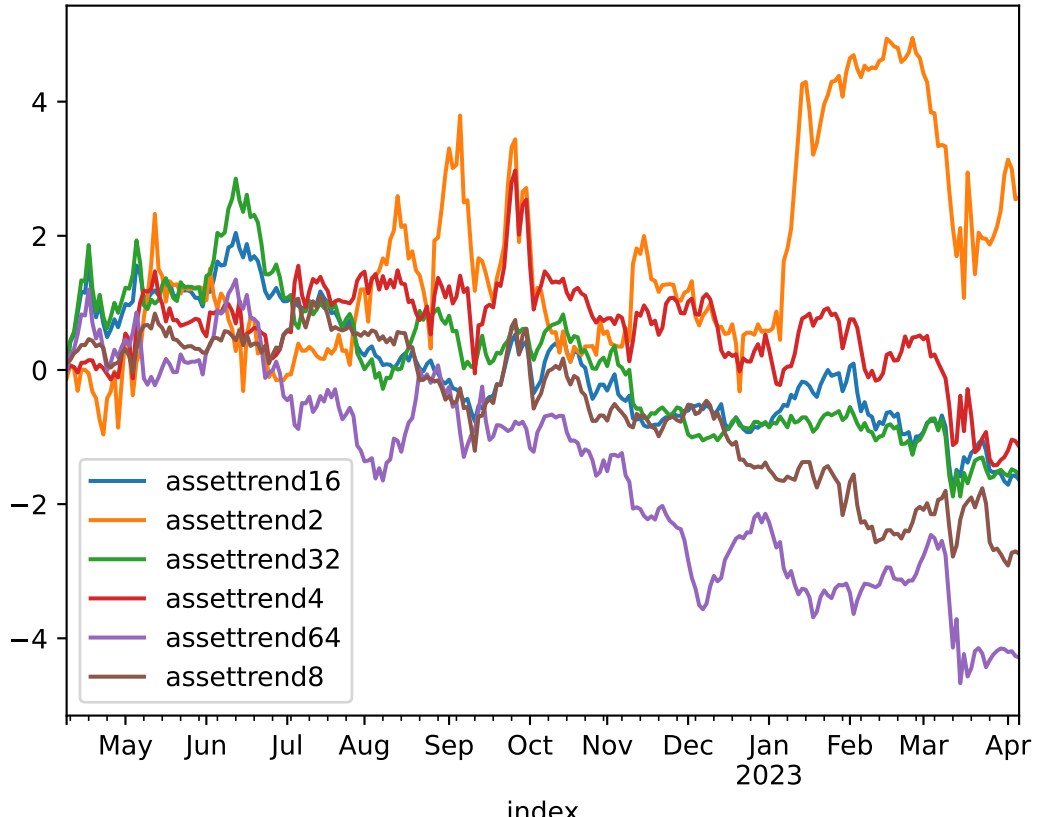


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -1.613, 'assettrend2': 2.532, 'assettrend32': -1.531, 'assettrend4': -1.123, 'assettrend64': -4.222, 'assettrend8': -2.697}

ann. std {'assettrend16': 2.503, 'assettrend2': 6.423, 'assettrend32': 2.888, 'assettrend4': 3.938, 'assettrend64': 3.266, 'assettrend8': 2.615}

ann. SR {'assettrend16': -0.64, 'assettrend2': 0.39, 'assettrend32': -0.53, 'assettrend4': -0.29, 'assettrend64': -1.29, 'assettrend8': -1.03}

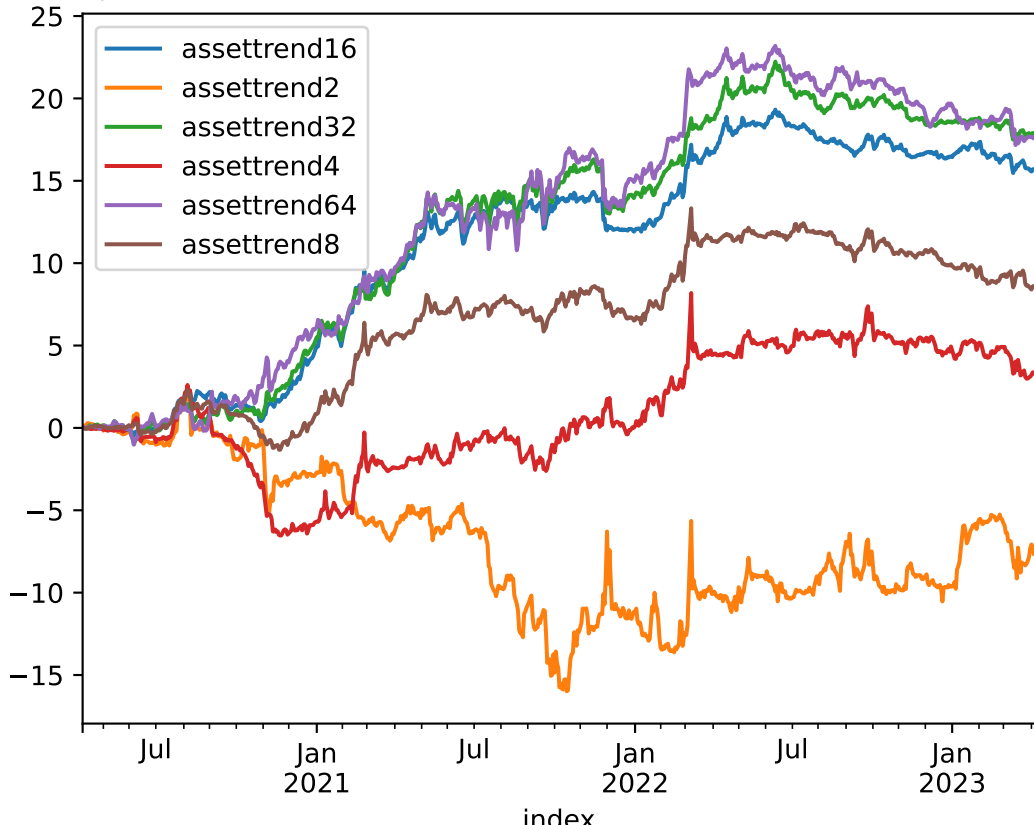


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.119, 'assettrend2': -2.502, 'assettrend32': 5.836, 'assettrend4': 1.071, 'assettrend64': 5.746, 'assettrend8': 2.807}

ann. std {'assettrend16': 3.4, 'assettrend2': 7.786, 'assettrend32': 4.117, 'assettrend4': 4.927, 'assettrend64': 4.992, 'assettrend8': 3.5}

ann. SR {'assettrend16': 1.51, 'assettrend2': -0.32, 'assettrend32': 1.42, 'assettrend4': 0.22, 'assettrend64': 1.15, 'assettrend8': 0.8}

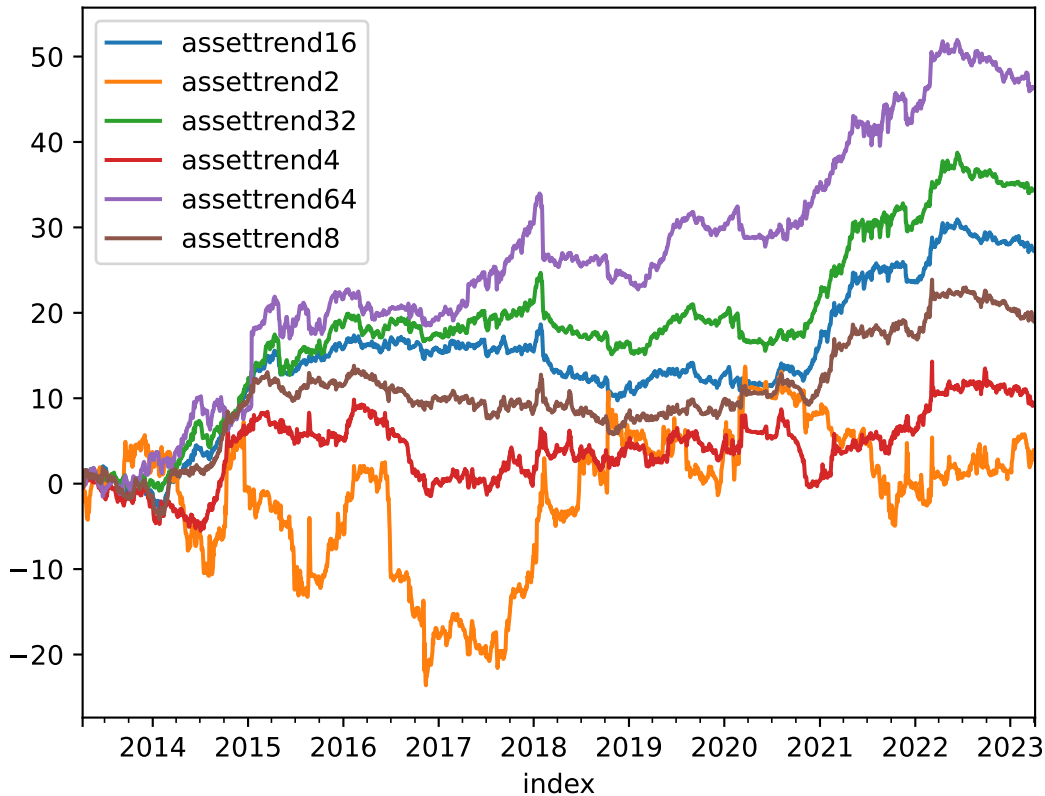


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.676, 'assettrend2': 0.335, 'assettrend32': 3.37, 'assettrend4': 0.92, 'assettrend64': 4.544, 'assettrend8': 1.877}

ann. std {'assettrend16': 3.163, 'assettrend2': 9.799, 'assettrend32': 3.595, 'assettrend4': 4.98, 'assettrend64': 5.198, 'assettrend8': 3.472}

ann. SR {'assettrend16': 0.85, 'assettrend2': 0.03, 'assettrend32': 0.94, 'assettrend4': 0.18, 'assettrend64': 0.87, 'assettrend8': 0.54}

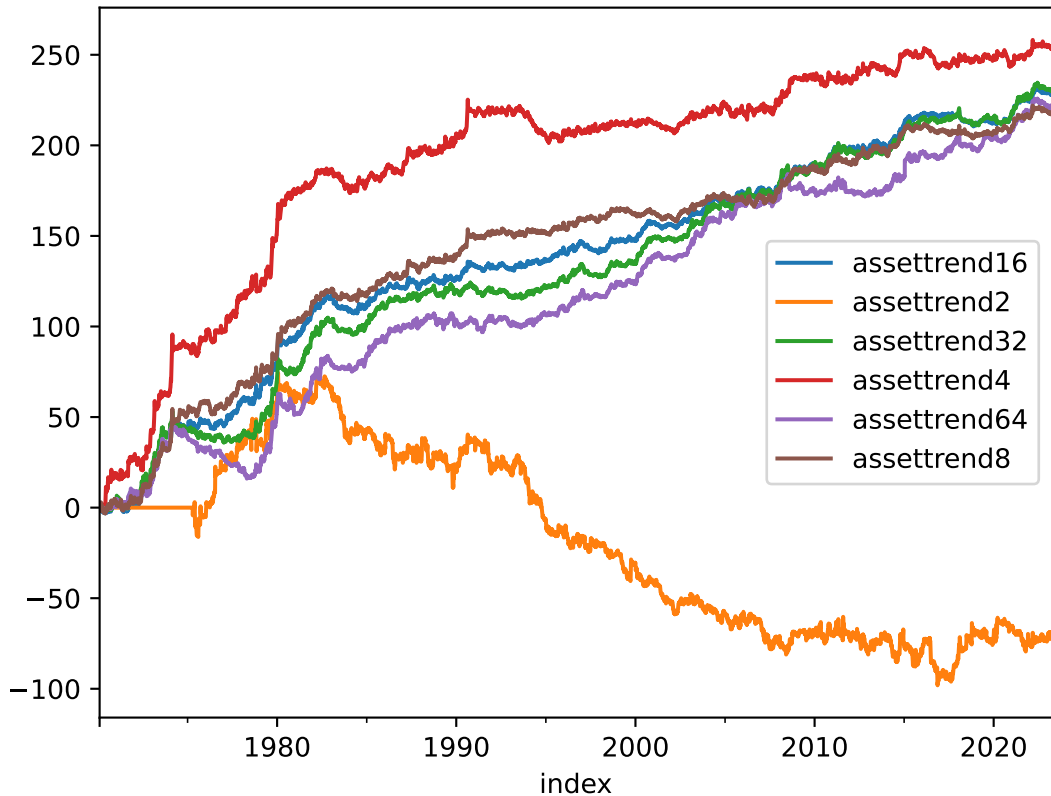


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.207, 'assettrend2': -1.312, 'assettrend32': 4.248, 'assettrend4': 4.674, 'assettrend64': 4.063, 'assettrend8': 4.008}

ann. std {'assettrend16': 4.305, 'assettrend2': 10.263, 'assettrend32': 4.496, 'assettrend4': 6.549, 'assettrend64': 4.997, 'assettrend8': 4.634}

ann. SR {'assettrend16': 0.98, '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': 19.902, 'breakout160': 1.577, 'breakout20': -19.978, 'breakout320': -9.47, 'breakout40': -19.508, 'breakout80': 2.005}

ann. std {'breakout10': 14.914, 'breakout160': 8.384, 'breakout20': 7.896, 'breakout320': 10.364, 'breakout40': 7.7, 'breakout80': 8.512}

ann. SR {'breakout10': 1.33, 'breakout160': 0.19, 'breakout20': -2.53, 'breakout320': -0.91, 'breakout40': -2.53, 'breakout80': 0.24}

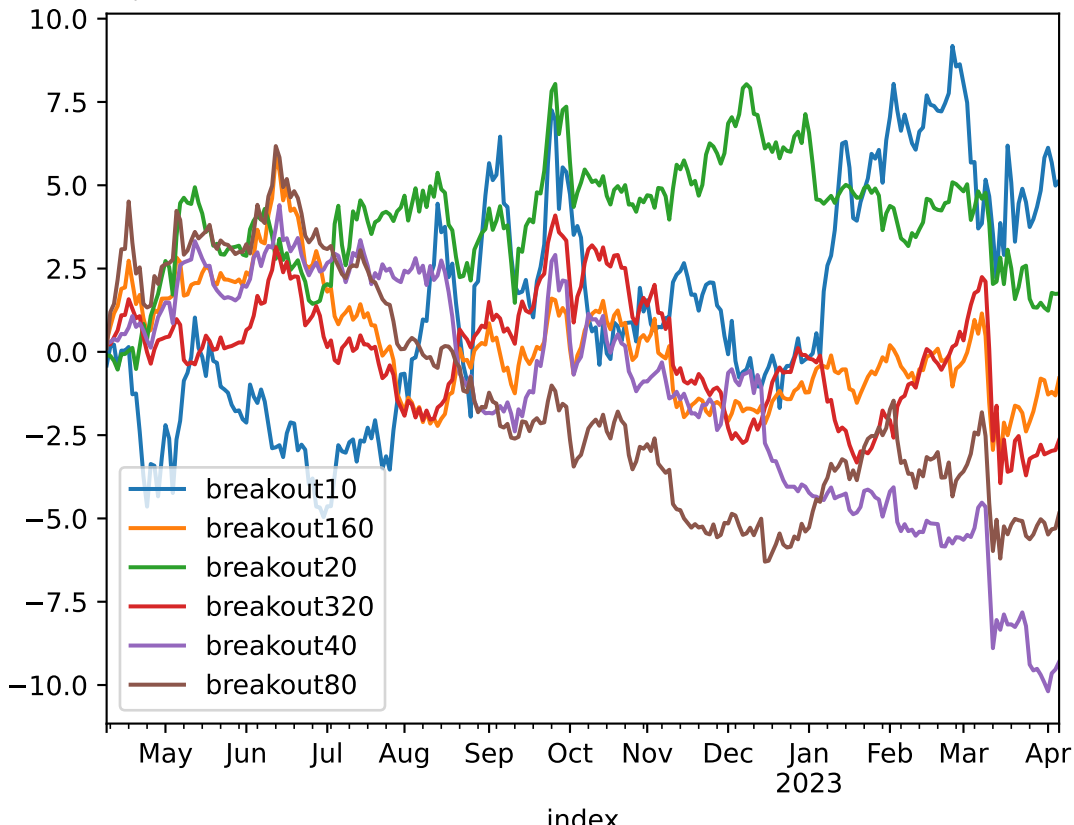


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 5.056, 'breakout160': -0.784, 'breakout20': 1.724, 'breakout320': -2.605, 'breakout40': -9.16, 'breakout80': -4.778}

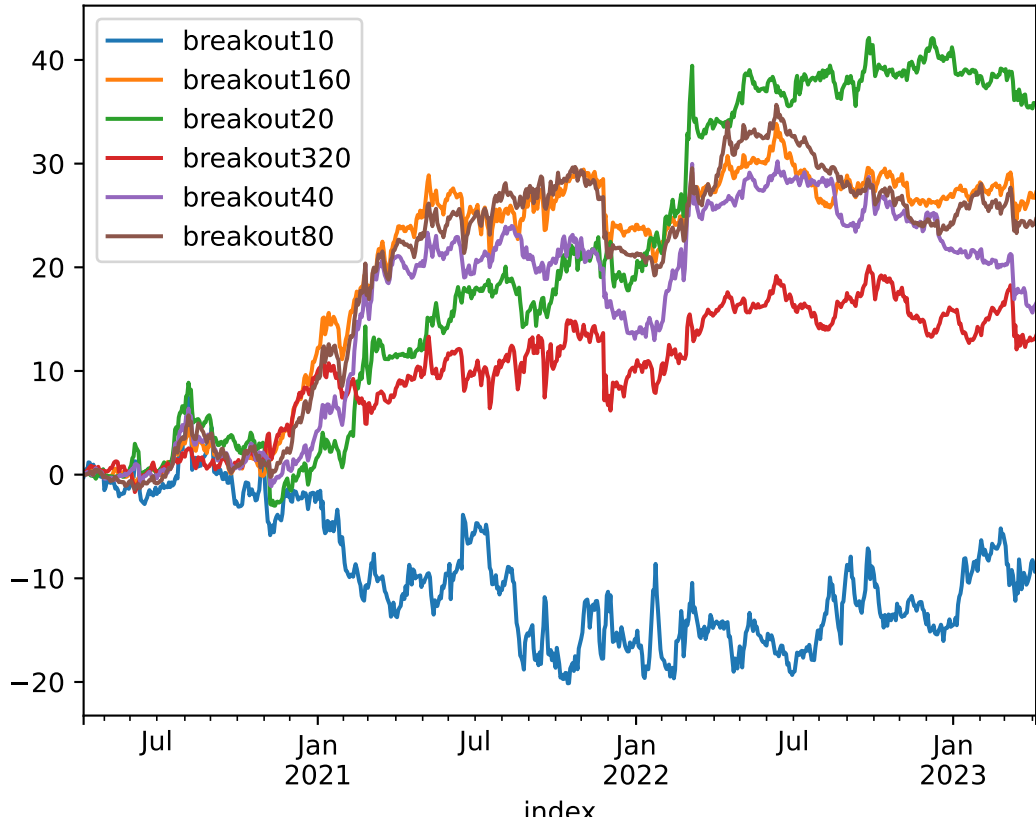
ann. std {'breakout10': 13.611, 'breakout160': 7.168, 'breakout20': 8.585, 'breakout320': 7.568, 'breakout40': 7.185, 'breakout80': 7.324}

ann. SR {'breakout10': 0.37, 'breakout160': -0.11, 'breakout20': 0.2, 'breakout320': -0.34, 'breakout40': -1.27, 'breakout80': -0.65}



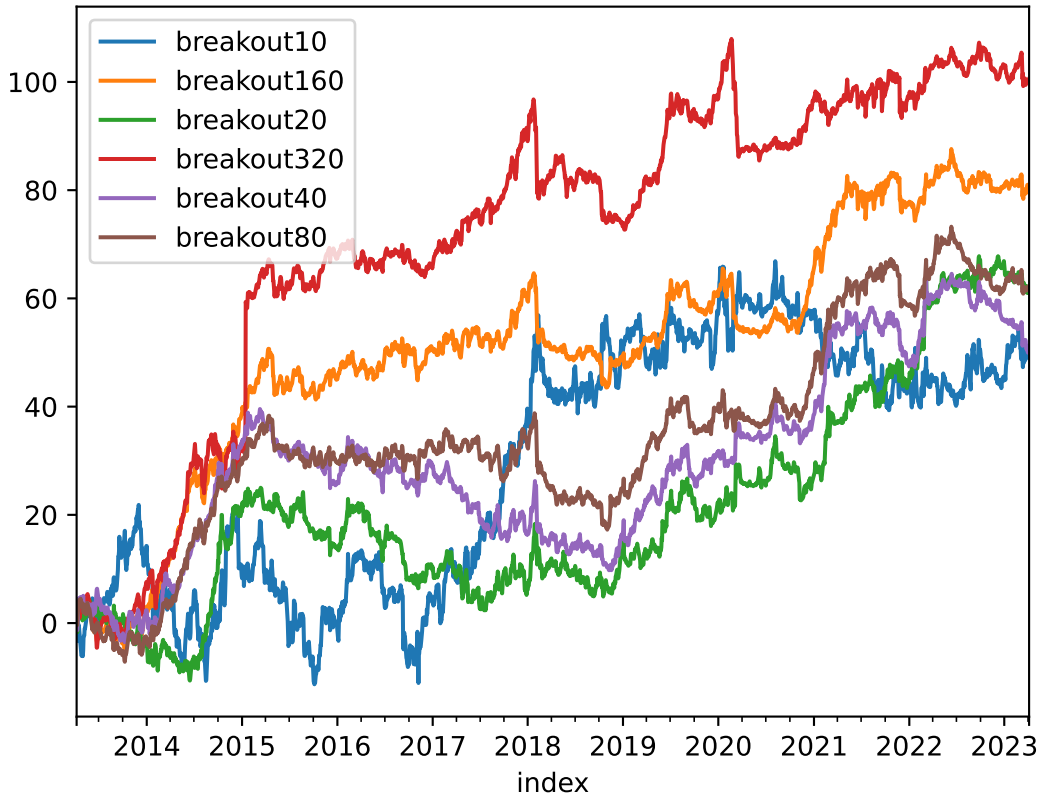
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.021, 'breakout160': 8.905, 'breakout20': 11.732, 'breakout320': 4.378, 'breakout40': 5.406, 'breakout80': 8.069}
 ann. std {'breakout10': 15.046, 'breakout160': 9.161, 'breakout20': 11.004, 'breakout320': 9.885, 'breakout40': 9.451, 'breakout80': 8.897}
 ann. SR {'breakout10': -0.2, 'breakout160': 0.97, 'breakout20': 1.07, 'breakout320': 0.44, 'breakout40': 0.57, 'breakout80': 0.91}



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

ann. mean {'breakout10': 4.929, 'breakout160': 7.945, 'breakout20': 6.036, 'breakout320': 9.864, 'breakout40': 4.989, 'breakout80': 6.106}
ann. std {'breakout10': 17.847, 'breakout160': 8.886, 'breakout20': 11.127, 'breakout320': 13.09, 'breakout40': 9.454, 'breakout80': 8.761}
ann. SR {'breakout10': 0.28, 'breakout160': 0.89, 'breakout20': 0.54, 'breakout320': 0.75, 'breakout40': 0.53, 'breakout80': 0.7}

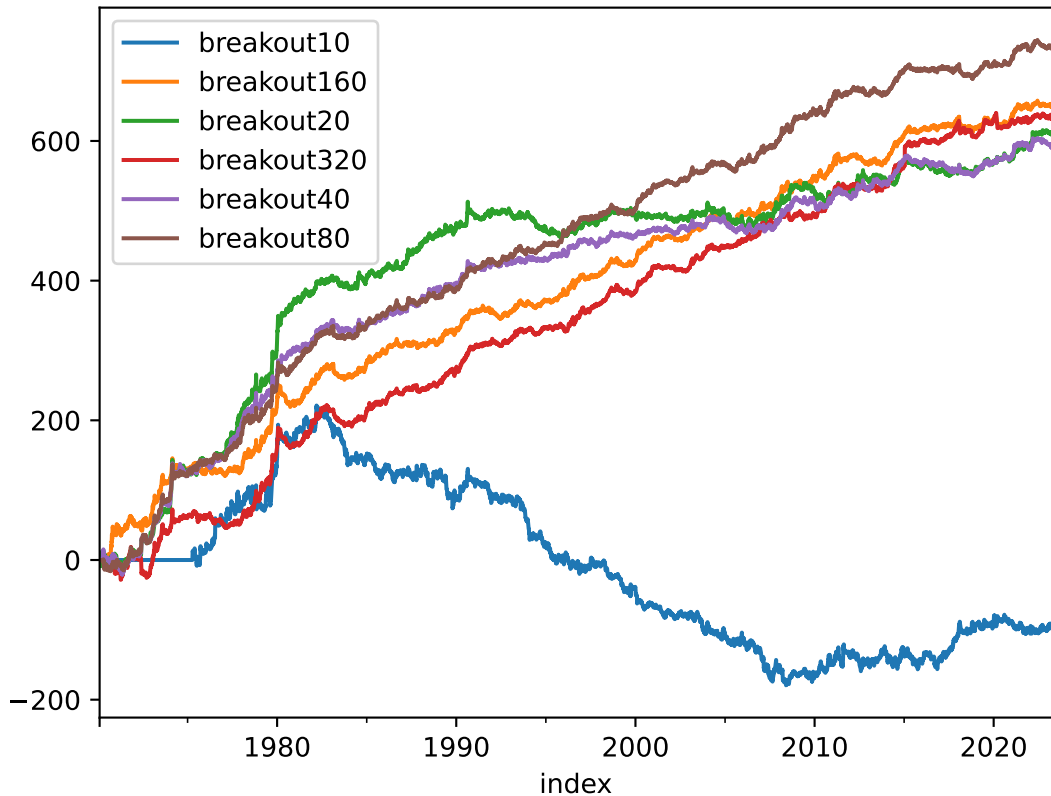


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.753, 'breakout160': 12.016, 'breakout20': 11.243, 'breakout320': 11.676, 'breakout40': 10.896, 'breakout80': 13.538}

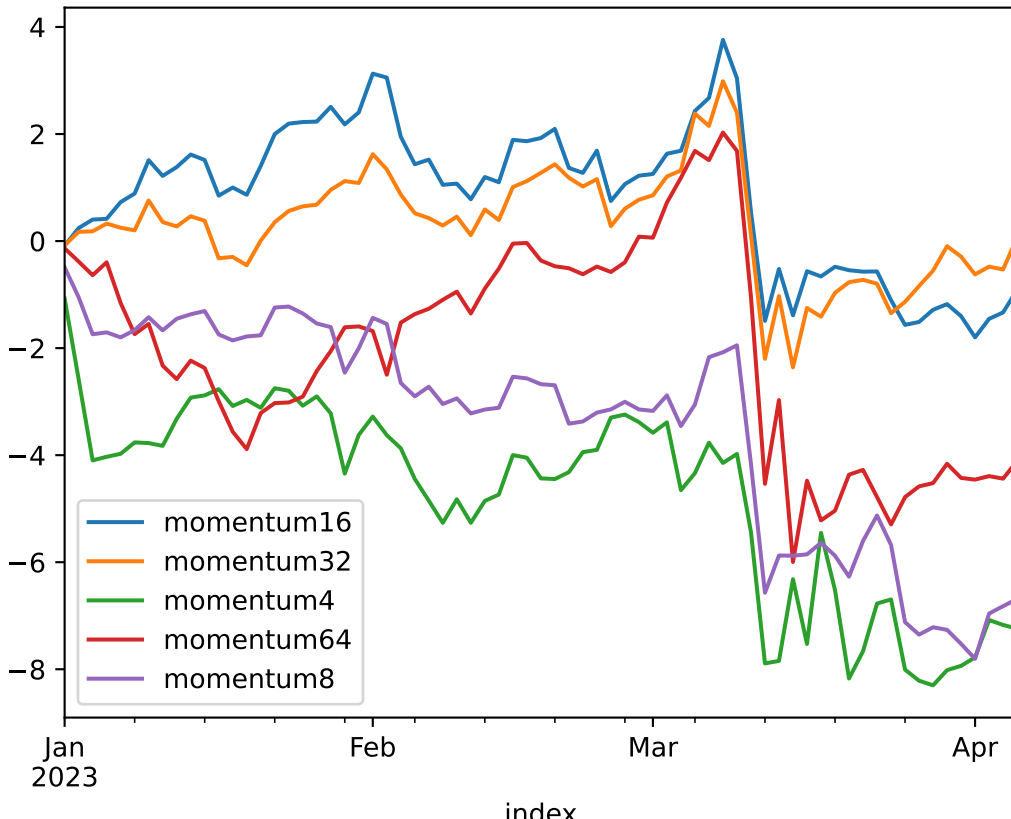
ann. std {'breakout10': 21.328, 'breakout160': 11.533, 'breakout20': 14.895, 'breakout320': 12.119, 'breakout40': 12.116, 'breakout80': 11.722}

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': -3.379, 'momentum32': 0.25, 'momentum4': -26.865, 'momentum64': -15.251, 'momentum8': -24.814}
 ann. std {'momentum16': 9.397, 'momentum32': 9.326, 'momentum4': 11.699, 'momentum64': 12.803, 'momentum8': 9.041}
 ann. SR {'momentum16': -0.36, 'momentum32': 0.03, 'momentum4': -2.3, 'momentum64': -1.19, 'momentum8': -2.74}

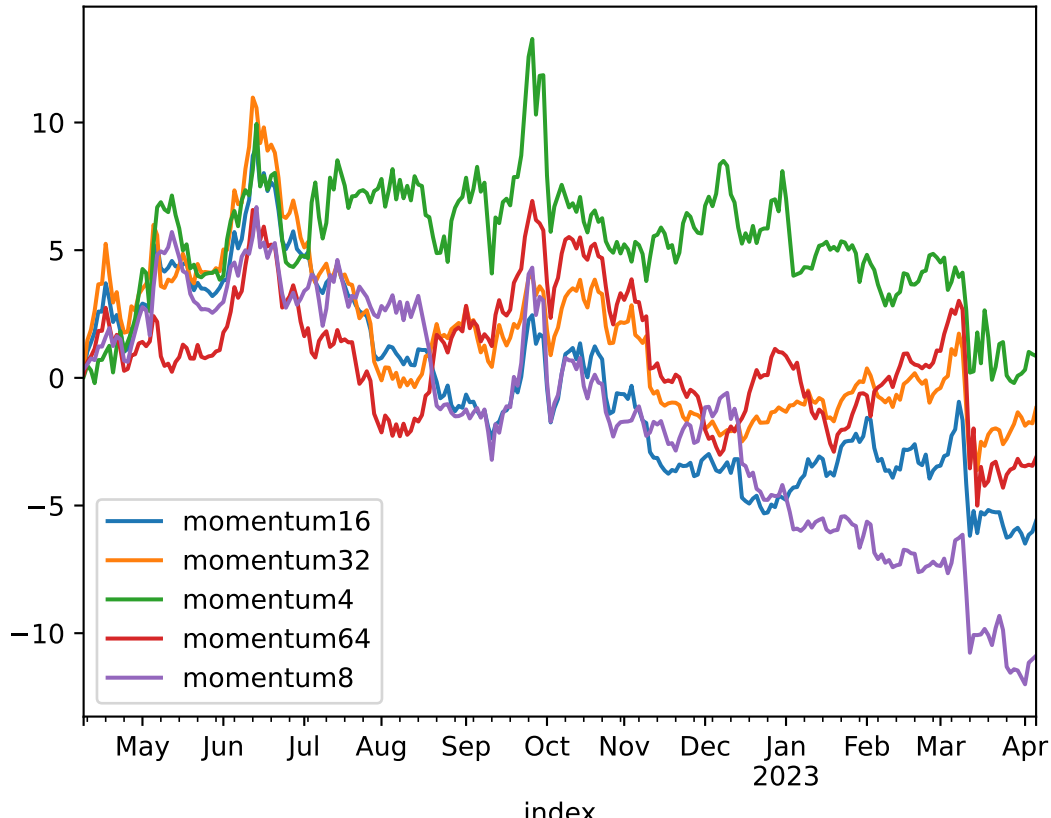


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -5.519, 'momentum32': -1.167, 'momentum4': 0.843, 'momentum64': -3.072, 'momentum8': -10.717}

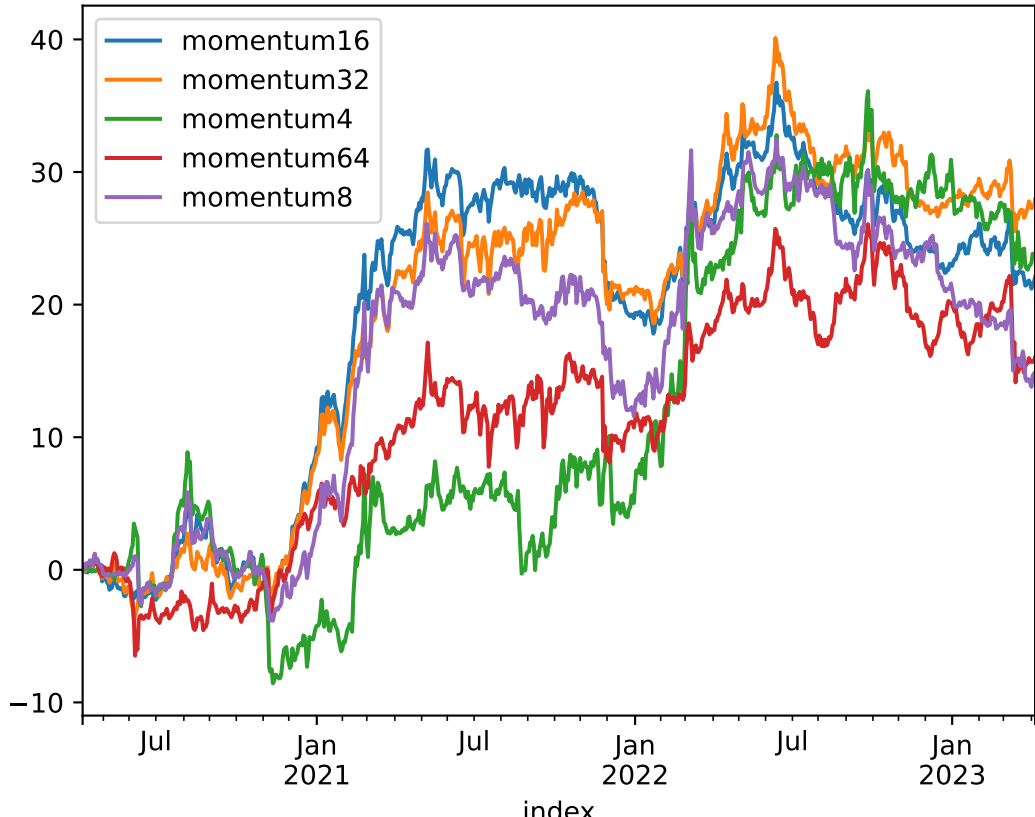
ann. std {'momentum16': 9.052, 'momentum32': 9.722, 'momentum4': 13.584, 'momentum64': 10.395, 'momentum8': 10.024}

ann. SR {'momentum16': -0.61, 'momentum32': -0.12, 'momentum4': 0.06, 'momentum64': -0.3, 'momentum8': -1.07}



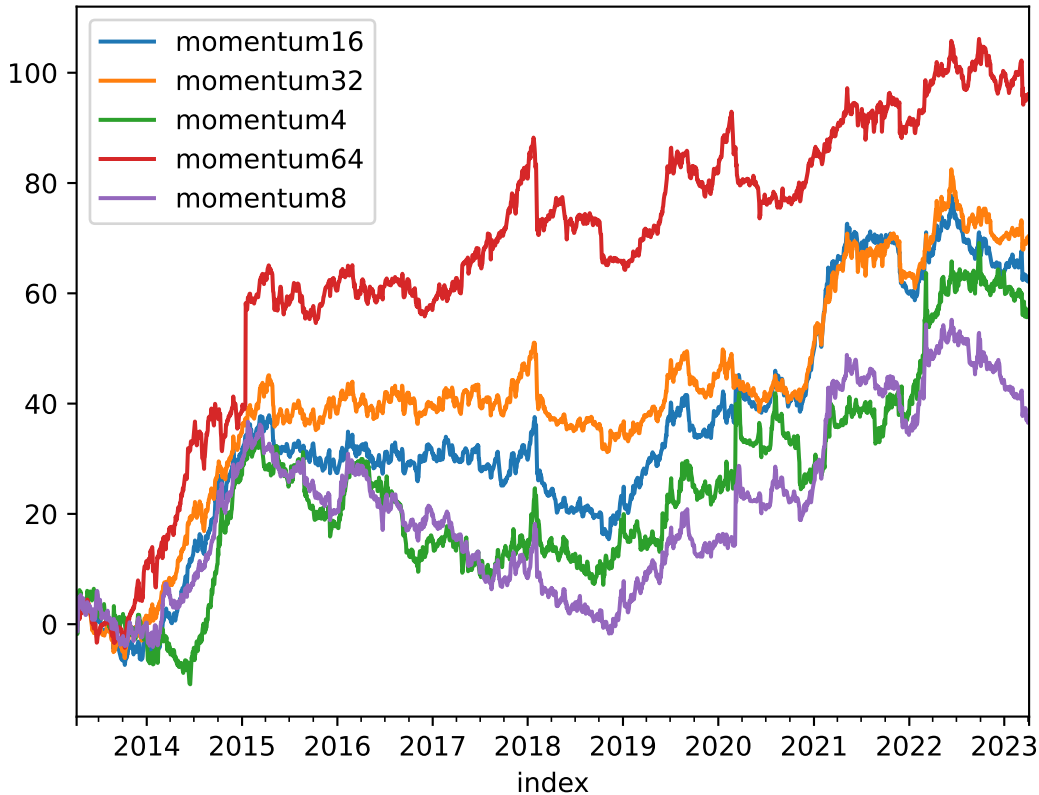
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.231, 'momentum32': 9.151, 'momentum4': 7.755, 'momentum64': 5.245, 'momentum8': 4.881}
ann. std {'momentum16': 10.141, 'momentum32': 10.387, 'momentum4': 14.594, 'momentum64': 10.817, 'momentum8': 11.392}
ann. SR {'momentum16': 0.71, 'momentum32': 0.88, 'momentum4': 0.53, 'momentum64': 0.48, 'momentum8': 0.43}



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

ann. mean {'momentum16': 6.182, 'momentum32': 6.901, 'momentum4': 5.565, 'momentum64': 9.428, 'momentum8': 3.692}
ann. std {'momentum16': 9.704, 'momentum32': 9.286, 'momentum4': 13.742, 'momentum64': 11.873, 'momentum8': 10.925}
ann. SR {'momentum16': 0.64, 'momentum32': 0.74, 'momentum4': 0.4, 'momentum64': 0.79, 'momentum8': 0.34}

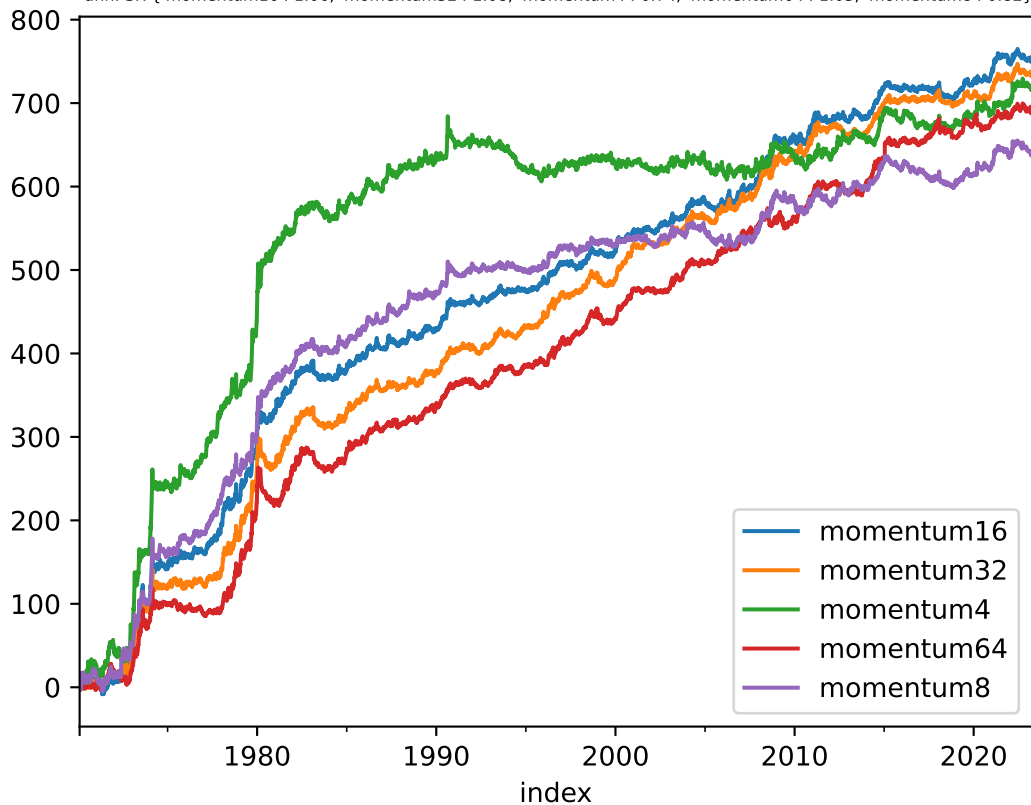


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.845, 'momentum32': 13.562, 'momentum4': 13.232, 'momentum64': 12.726, 'momentum8': 11.767}

ann. std {'momentum16': 13.051, 'momentum32': 12.614, 'momentum4': 17.899, 'momentum64': 12.336, 'momentum8': 14.336}

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

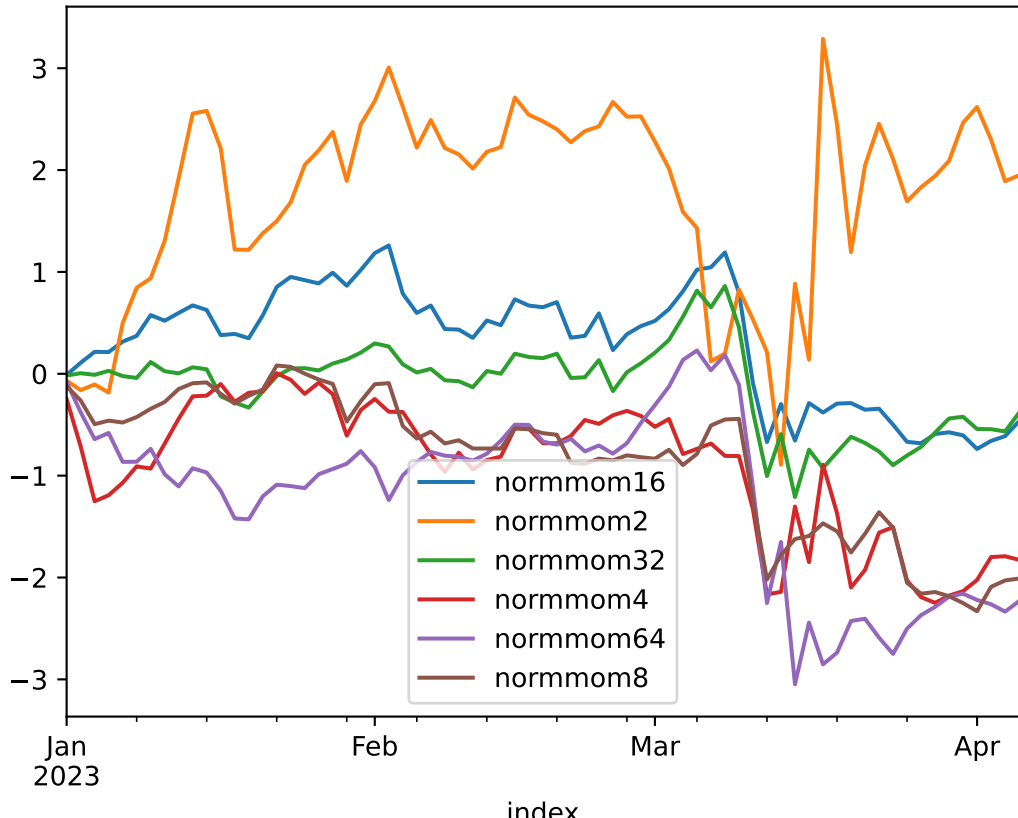


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.727, 'normmom2': 7.229, 'normmom32': -1.419, 'normmom4': -6.777, 'normmom64': -8.28, 'normmom8': -7.457}

ann. std {'normmom16': 3.4, 'normmom2': 9.877, 'normmom32': 3.349, 'normmom4': 4.67, 'normmom64': 4.989, 'normmom8': 3.192}

ann. SR {'normmom16': -0.51, 'normmom2': 0.73, 'normmom32': -0.42, 'normmom4': -1.45, 'normmom64': -1.66, 'normmom8': -2.34}

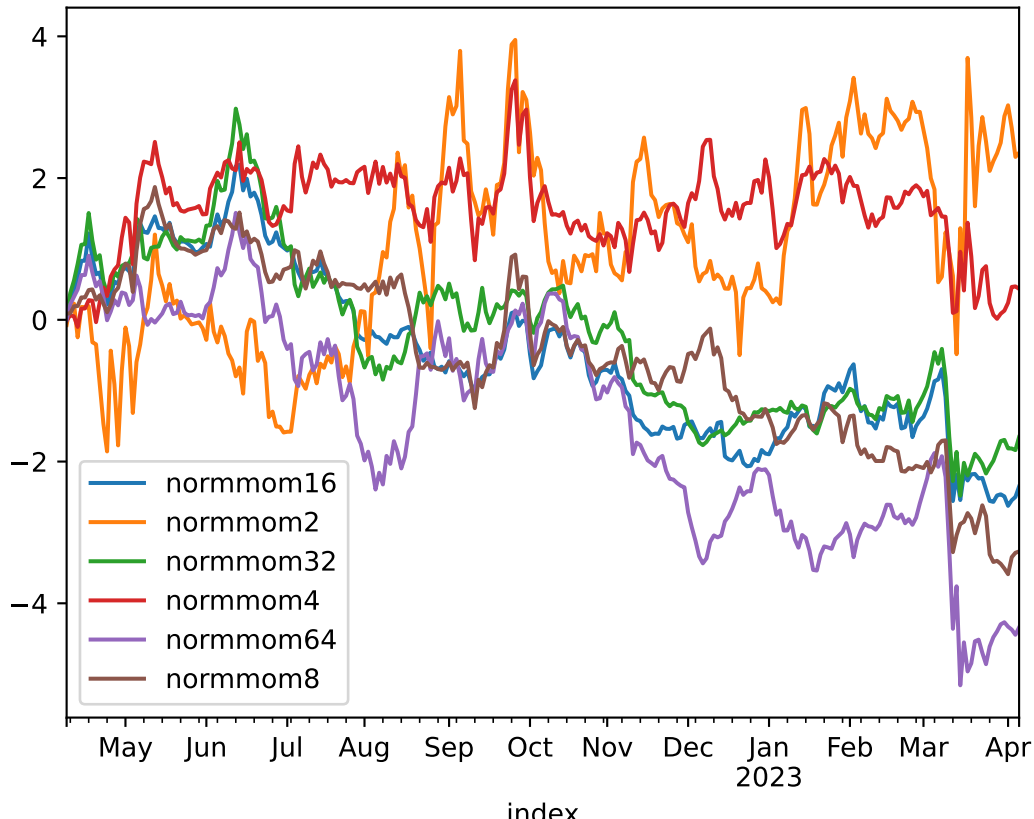


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.317, 'normmom2': 2.32, 'normmom32': -1.629, 'normmom4': 0.43, 'normmom64': -4.274, 'normmom8': -3.218}

ann. std {'normmom16': 2.713, 'normmom2': 7.856, 'normmom32': 3.041, 'normmom4': 4.342, 'normmom64': 3.865, 'normmom8': 2.953}

ann. SR {'normmom16': -0.85, 'normmom2': 0.3, 'normmom32': -0.54, 'normmom4': 0.1, 'normmom64': -1.11, 'normmom8': -1.09}

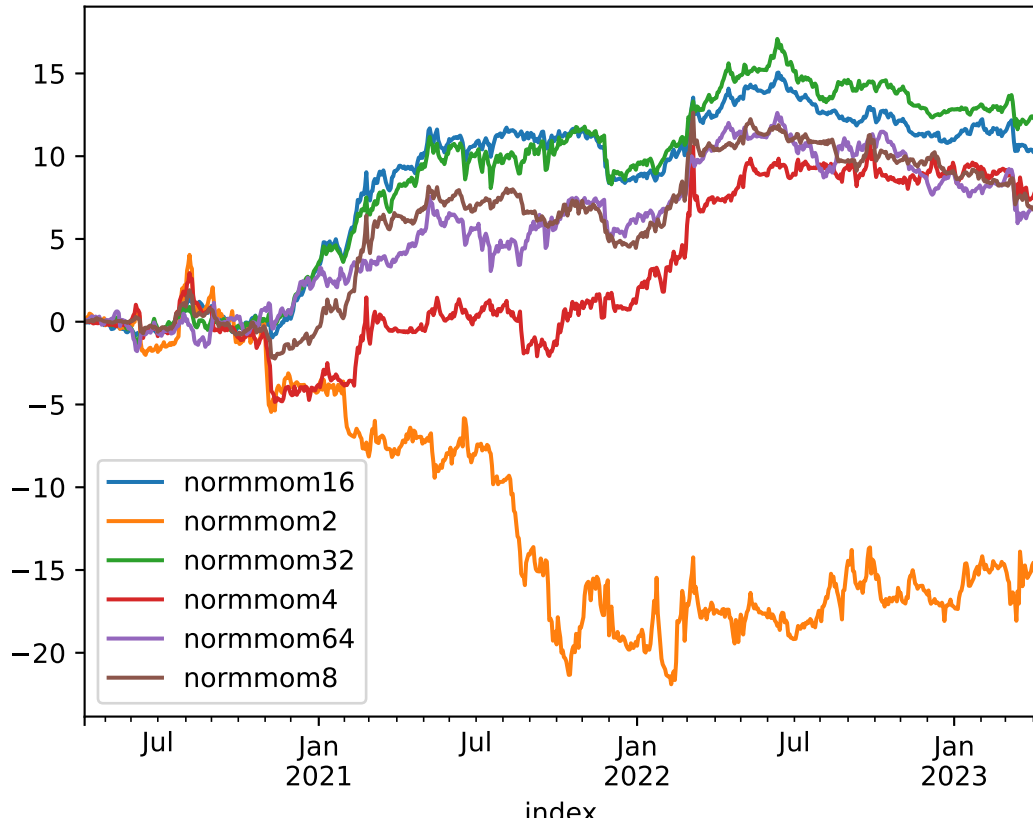


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.442, 'normmom2': -4.985, 'normmom32': 4.076, 'normmom4': 2.548, 'normmom64': 2.215, 'normmom8': 2.324}

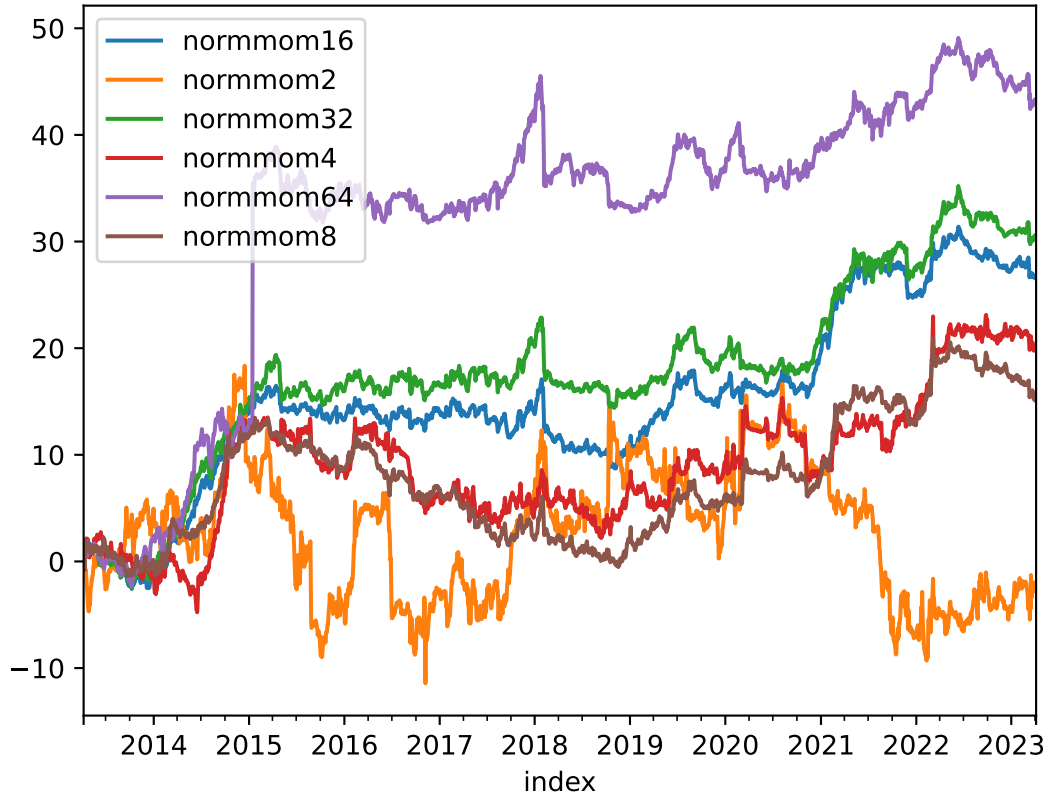
ann. std {'normmom16': 3.507, 'normmom2': 8.611, 'normmom32': 3.878, 'normmom4': 5.346, 'normmom64': 4.274, 'normmom8': 3.913}

ann. SR {'normmom16': 0.98, 'normmom2': -0.58, 'normmom32': 1.05, 'normmom4': 0.48, 'normmom64': 0.52, 'normmom8': 0.59}



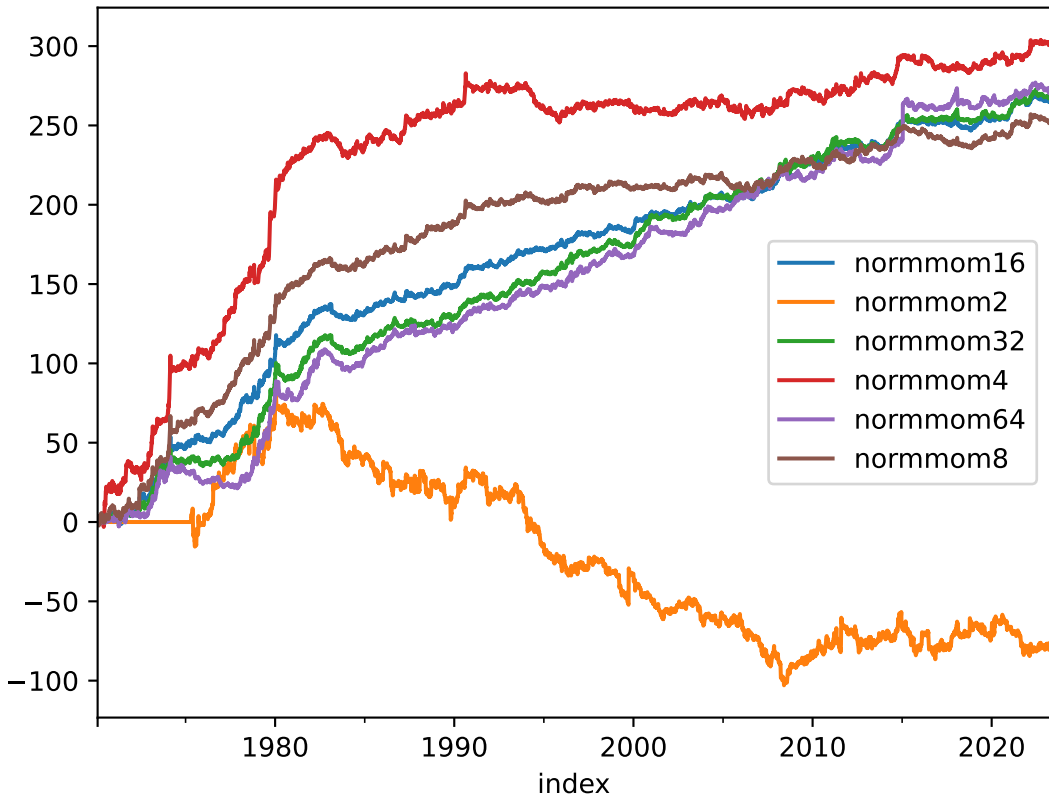
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.635, 'normmom2': -0.256, 'normmom32': 3.0, 'normmom4': 1.98, 'normmom64': 4.244, 'normmom8': 1.511}
ann. std {'normmom16': 3.488, 'normmom2': 10.336, 'normmom32': 3.631, 'normmom4': 5.468, 'normmom64': 8.271, 'normmom8': 3.91}
ann. SR {'normmom16': 0.76, 'normmom2': -0.02, 'normmom32': 0.83, 'normmom4': 0.36, 'normmom64': 0.51, 'normmom8': 0.39}



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

ann. mean {'normmom16': 4.89, 'normmom2': -1.434, 'normmom32': 4.942, 'normmom4': 5.554, 'normmom64': 5.005, 'normmom8': 4.642}
ann. std {'normmom16': 4.534, 'normmom2': 11.616, 'normmom32': 4.611, 'normmom4': 7.387, 'normmom64': 5.872, 'normmom8': 5.367}
ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

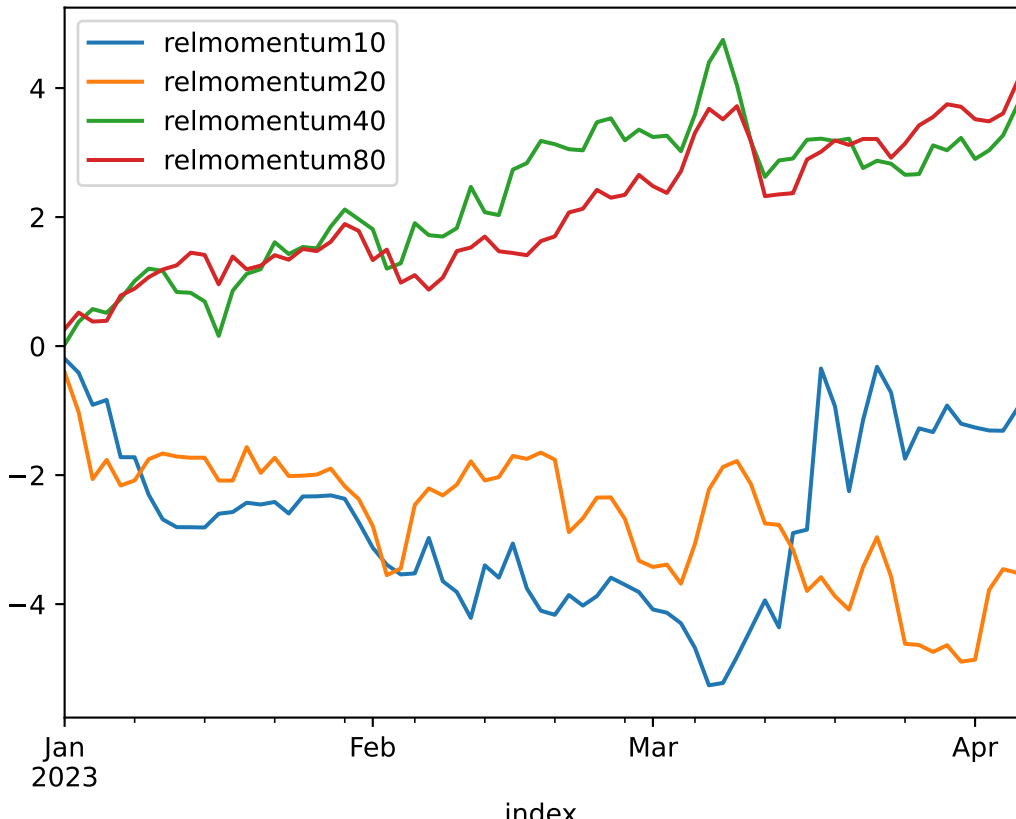


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -3.621, 'relmomentum20': -13.04, 'relmomentum40': 13.815, 'relmomentum80': 15.171}

ann. std {'relmomentum10': 8.767, 'relmomentum20': 6.942, 'relmomentum40': 5.376, 'relmomentum80': 4.178}

ann. SR {'relmomentum10': -0.41, 'relmomentum20': -1.88, 'relmomentum40': 2.57, 'relmomentum80': 3.63}

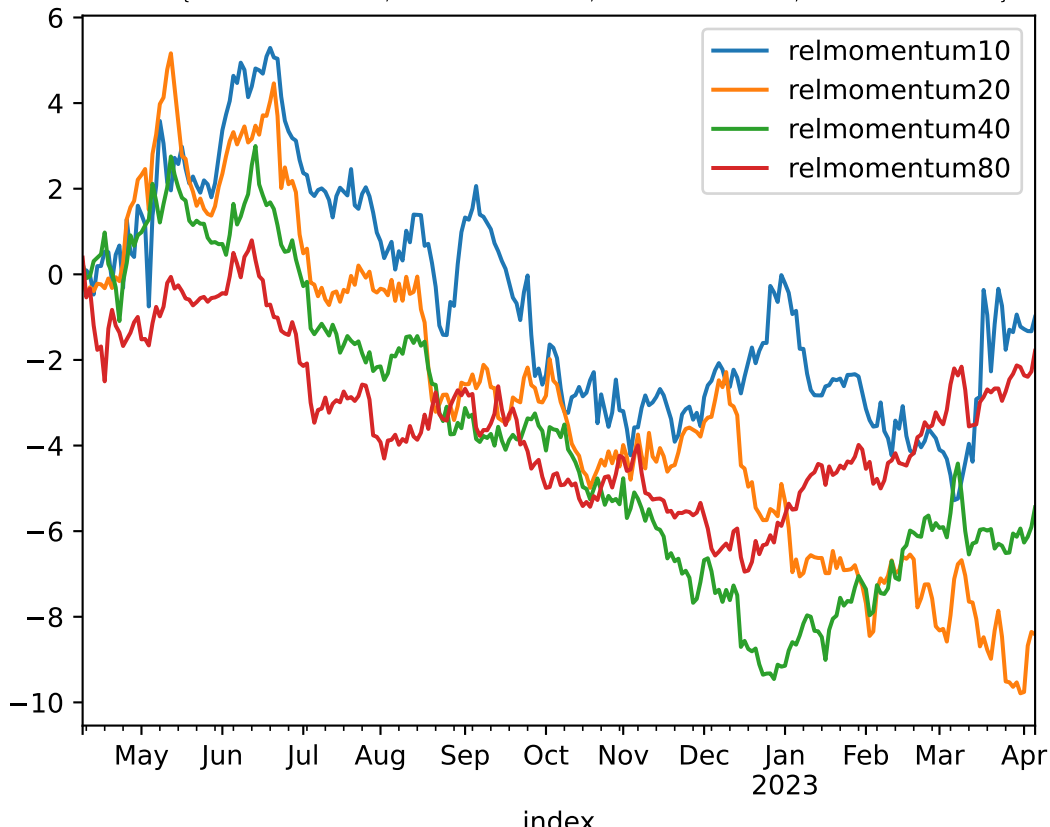


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -0.979, 'relmomentum20': -8.282, 'relmomentum40': -5.359, 'relmomentum80': -1.761}

ann. std {'relmomentum10': 8.344, 'relmomentum20': 6.68, 'relmomentum40': 5.495, 'relmomentum80': 4.902}

ann. SR {'relmomentum10': -0.12, 'relmomentum20': -1.24, 'relmomentum40': -0.98, 'relmomentum80': -0.36}

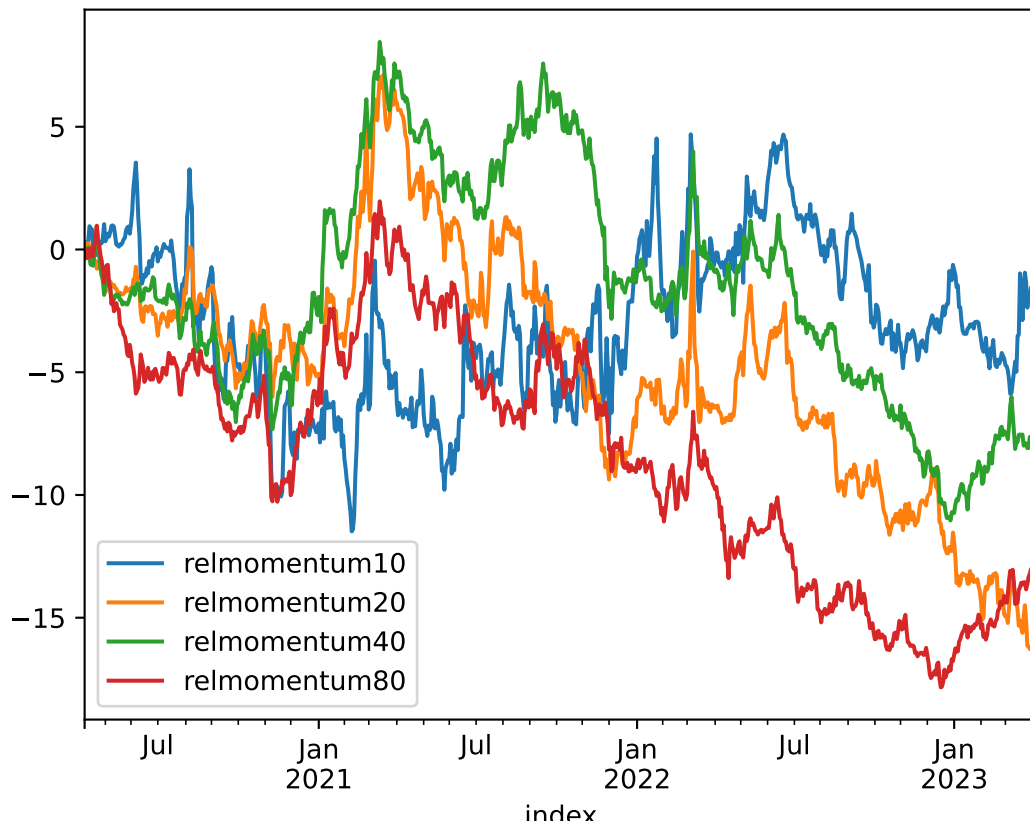


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.524, 'relmomentum20': -4.925, 'relmomentum40': -2.3, 'relmomentum80': -4.15}

ann. std {'relmomentum10': 11.925, 'relmomentum20': 8.344, 'relmomentum40': 6.976, 'relmomentum80': 6.349}

ann. SR {'relmomentum10': -0.04, 'relmomentum20': -0.59, 'relmomentum40': -0.33, 'relmomentum80': -0.65}

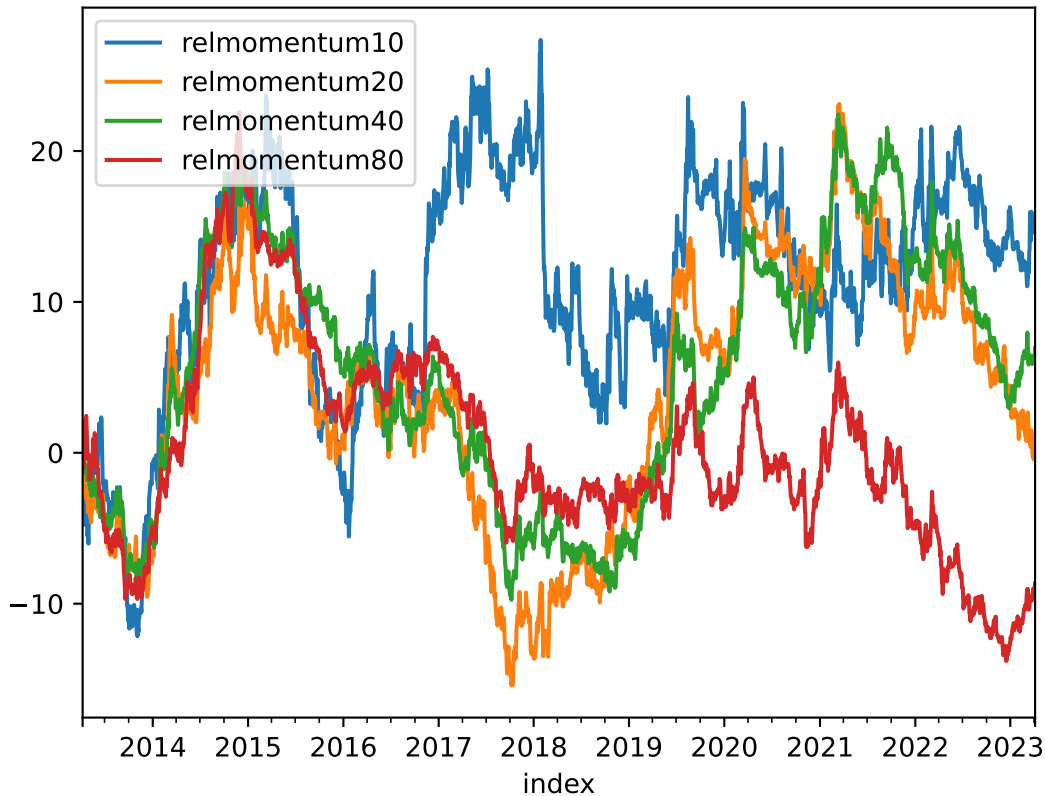


Total Trading Rule P&L for period '10Y'

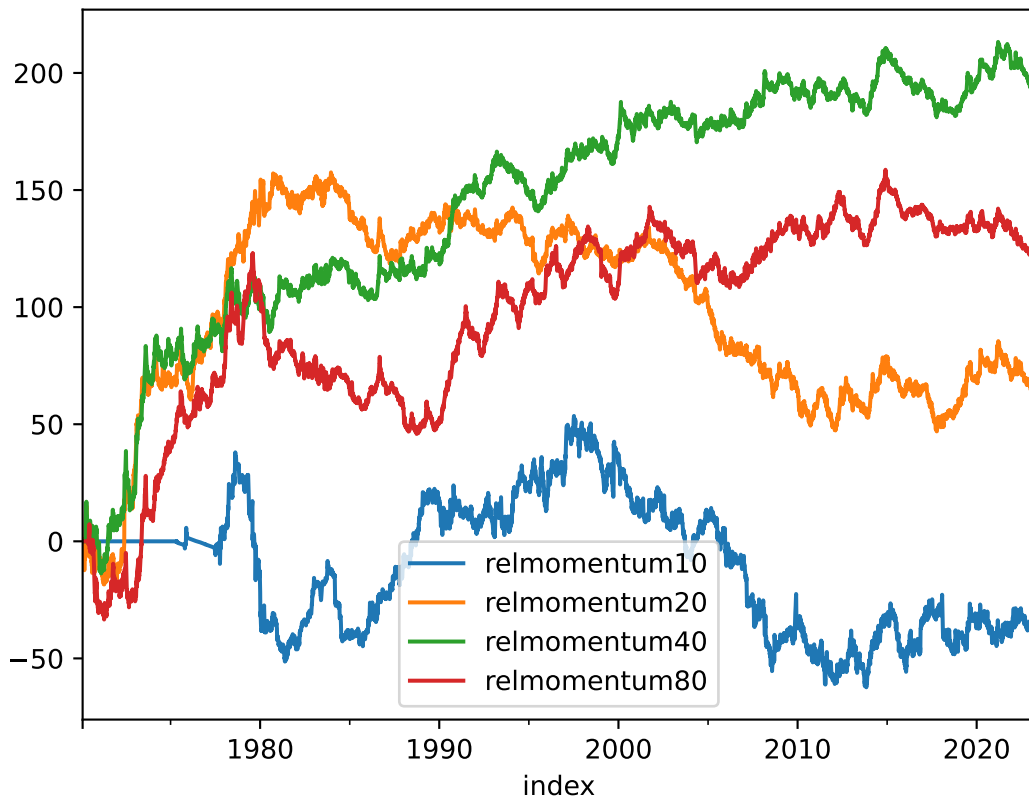
ann. mean {'relmomentum10': 1.503, 'relmomentum20': 0.093, 'relmomentum40': 0.682, 'relmomentum80': -0.848}

ann. std {'relmomentum10': 13.476, 'relmomentum20': 8.623, 'relmomentum40': 7.03, 'relmomentum80': 6.446}

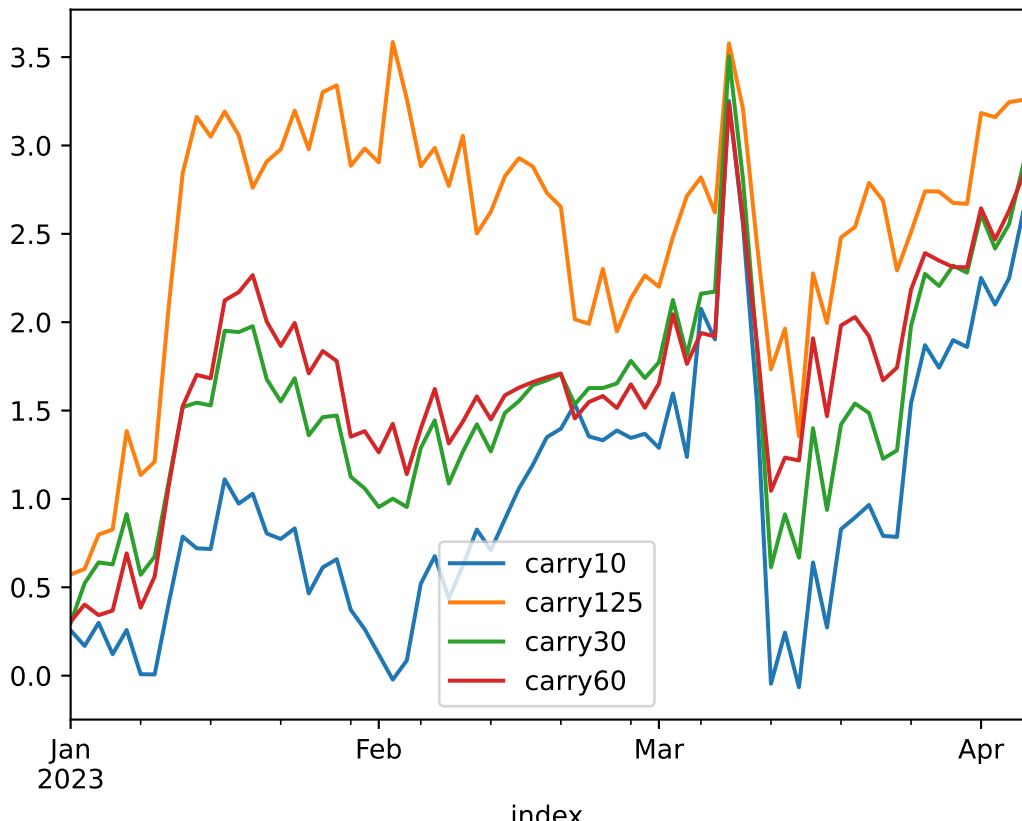
ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.01, 'relmomentum40': 0.1, 'relmomentum80': -0.13}



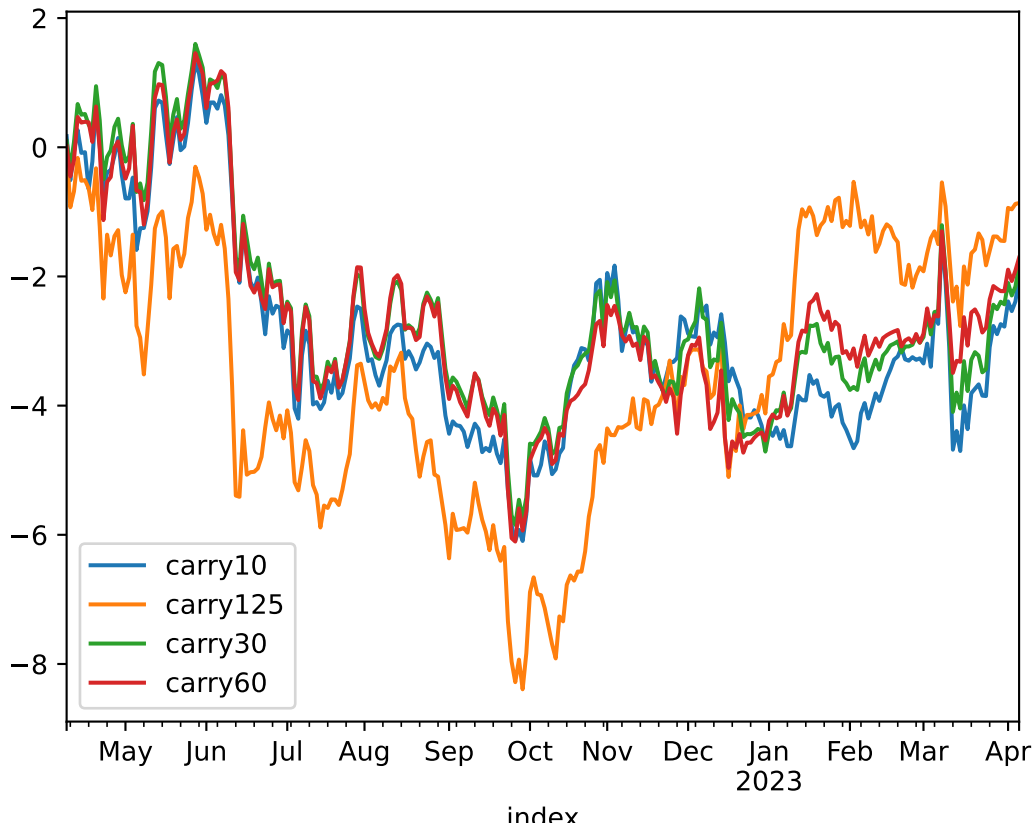
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.643, 'relmomentum20': 1.168, 'relmomentum40': 3.65, 'relmomentum80': 2.352}
ann. std {'relmomentum10': 13.397, 'relmomentum20': 10.472, 'relmomentum40': 9.642, 'relmomentum80': 9.787}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 9.723, 'carry125': 12.089, 'carry30': 10.712, 'carry60': 10.496}
ann. std {'carry10': 6.293, 'carry125': 5.848, 'carry30': 5.754, 'carry60': 5.128}
ann. SR {'carry10': 1.55, 'carry125': 2.07, 'carry30': 1.86, 'carry60': 2.05}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -1.985, 'carry125': -0.85, 'carry30': -1.796, 'carry60': -1.684}
ann. std {'carry10': 6.32, 'carry125': 7.034, 'carry30': 6.218, 'carry60': 6.229}
ann. SR {'carry10': -0.31, 'carry125': -0.12, 'carry30': -0.29, 'carry60': -0.27}

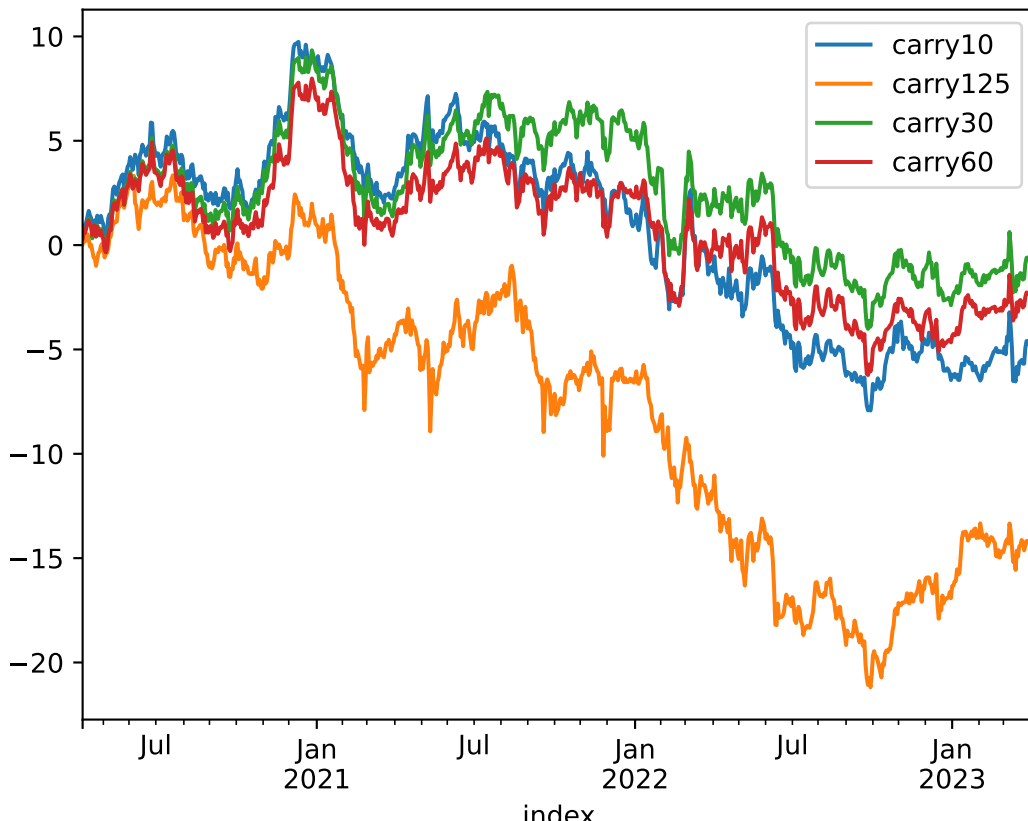


Total Trading Rule P&L for period '3Y'

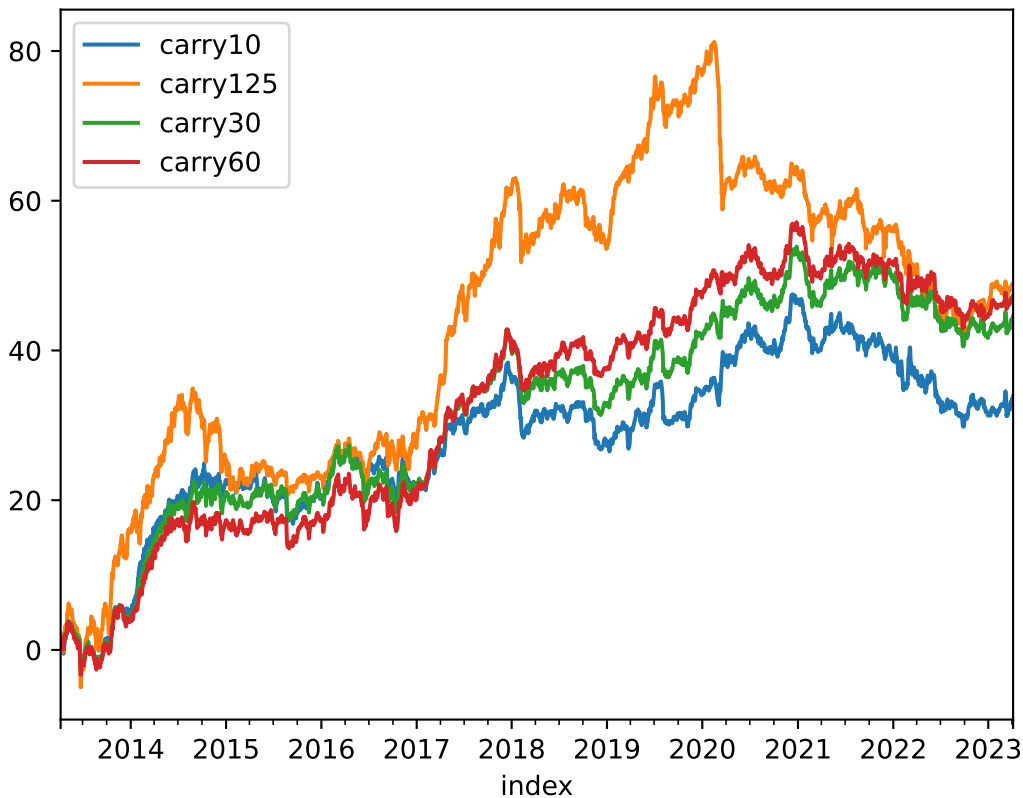
ann. mean {'carry10': -1.259, 'carry125': -4.472, 'carry30': 0.003, 'carry60': -0.599}

ann. std {'carry10': 6.584, 'carry125': 7.998, 'carry30': 6.504, 'carry60': 6.482}

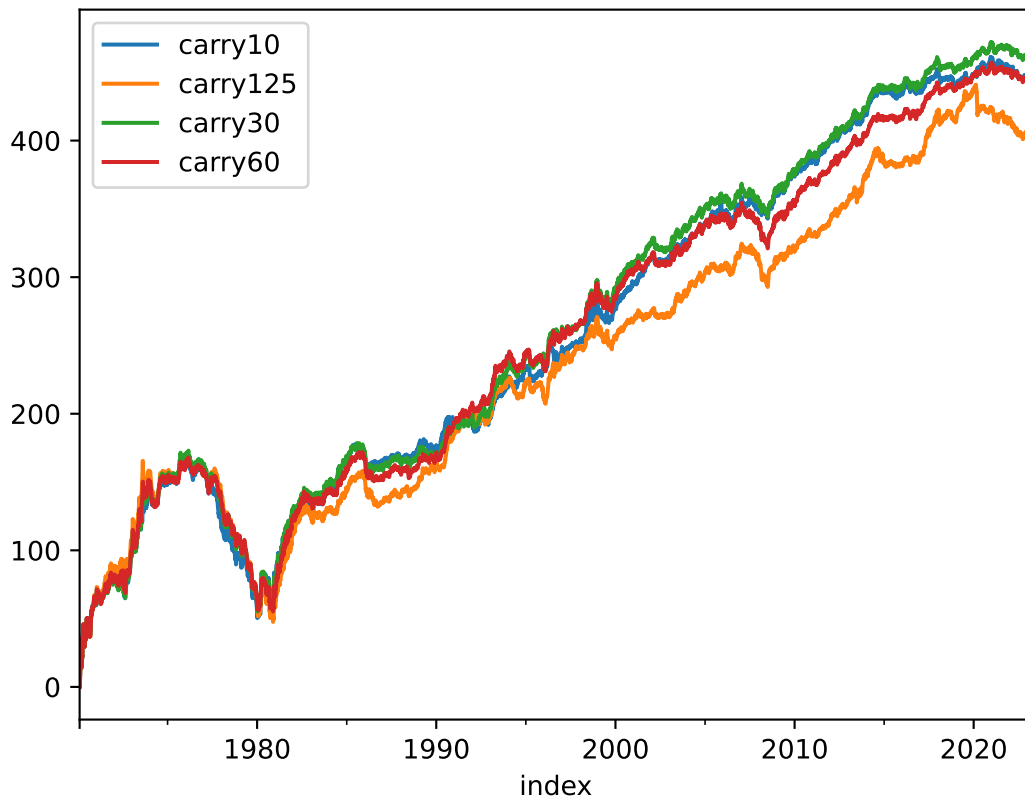
ann. SR {'carry10': -0.19, 'carry125': -0.56, 'carry30': 0.0, 'carry60': -0.09}



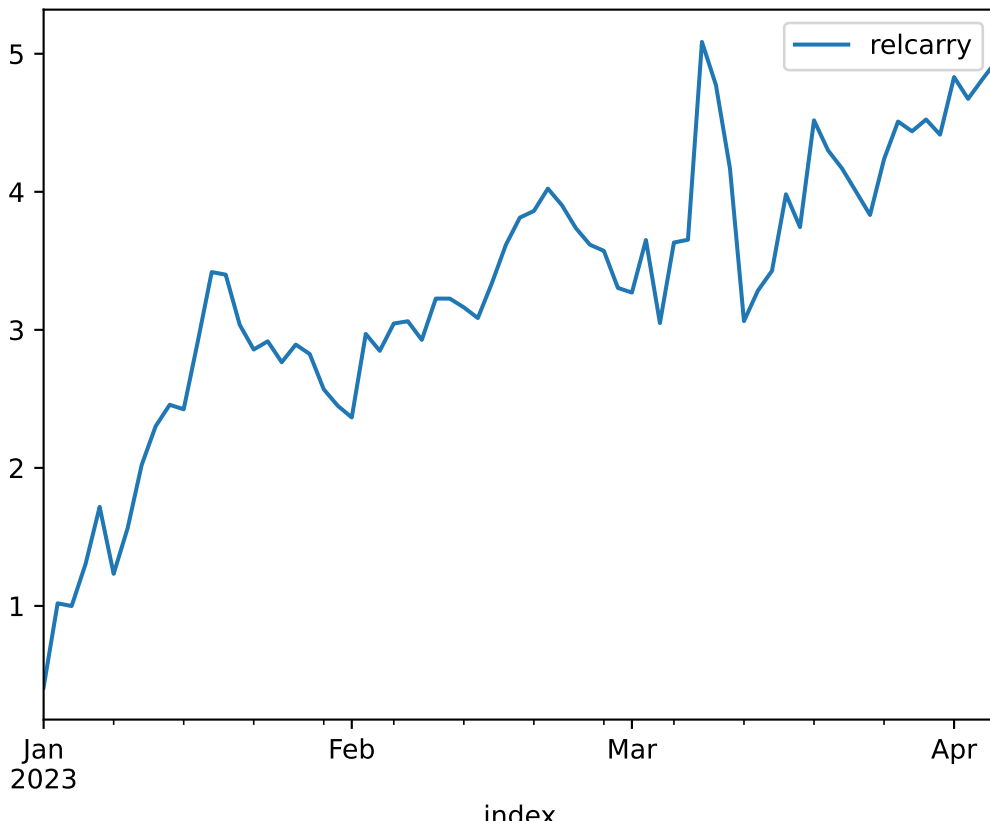
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.328, 'carry125': 4.799, 'carry30': 4.371, 'carry60': 4.643}
ann. std {'carry10': 6.39, 'carry125': 8.994, 'carry30': 6.477, 'carry60': 6.429}
ann. SR {'carry10': 0.52, 'carry125': 0.53, 'carry30': 0.67, 'carry60': 0.72}



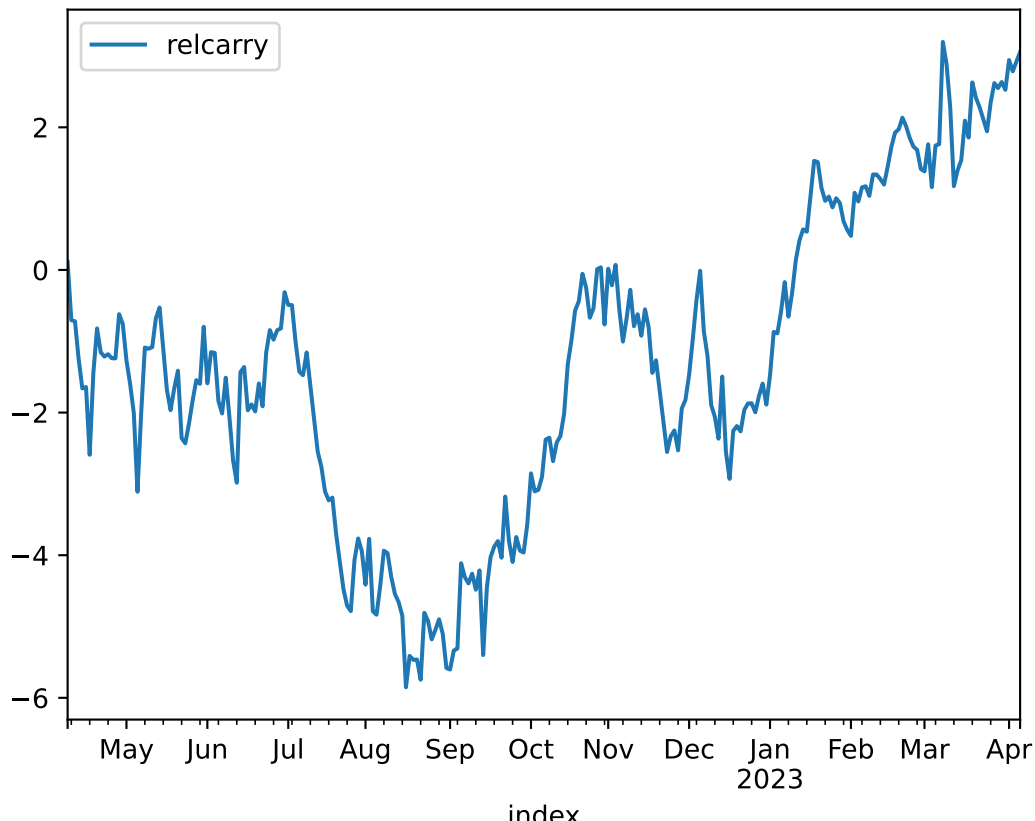
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.261, 'carry125': 7.54, 'carry30': 8.542, 'carry60': 8.25}
ann. std {'carry10': 11.204, 'carry125': 11.561, 'carry30': 11.261, 'carry60': 11.264}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



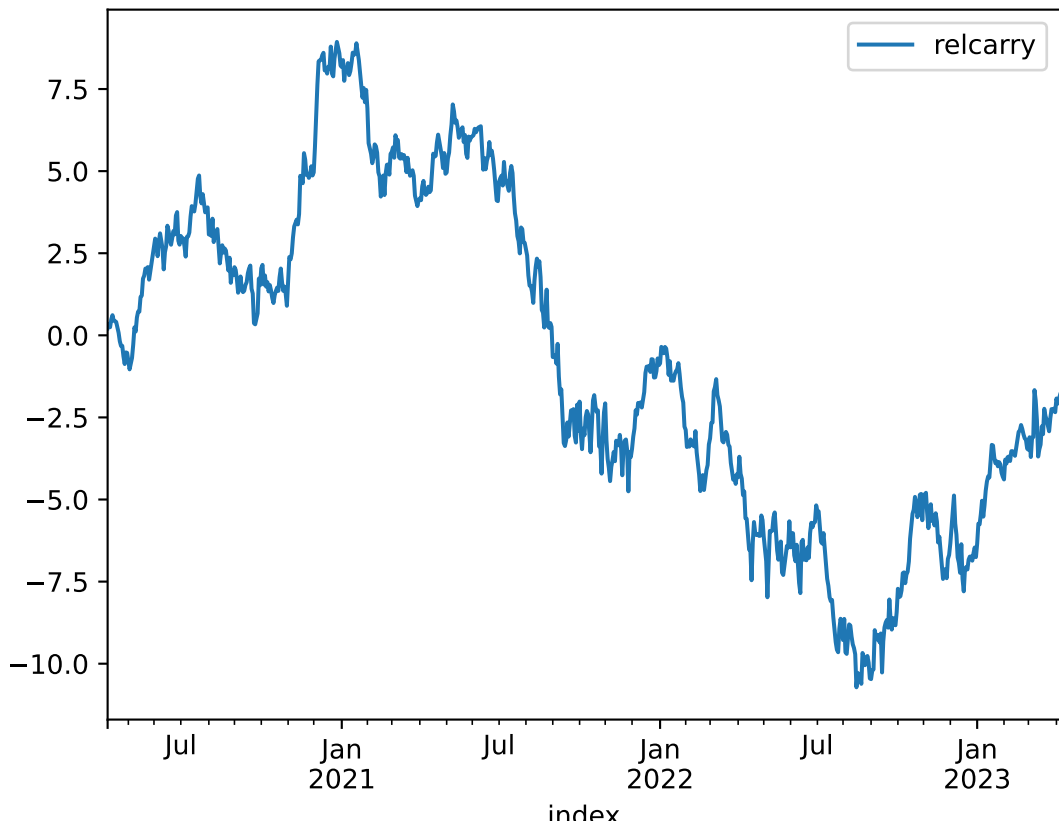
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 18.346}
ann. std {'relcarry': 5.827}
ann. SR {'relcarry': 3.15}



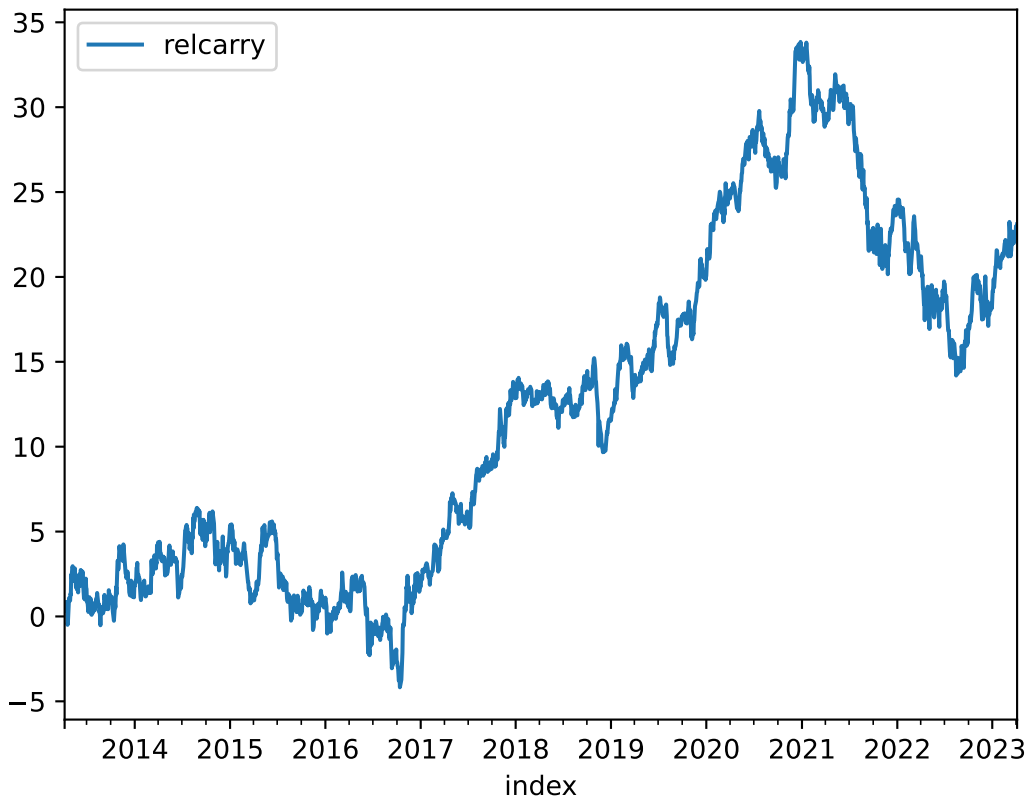
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 3.01}
ann. std {'relcarry': 7.167}
ann. SR {'relcarry': 0.42}



Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.592}
ann. std {'relcarry': 6.641}
ann. SR {'relcarry': -0.09}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.267}
ann. std {'relcarry': 5.835}
ann. SR {'relcarry': 0.39}

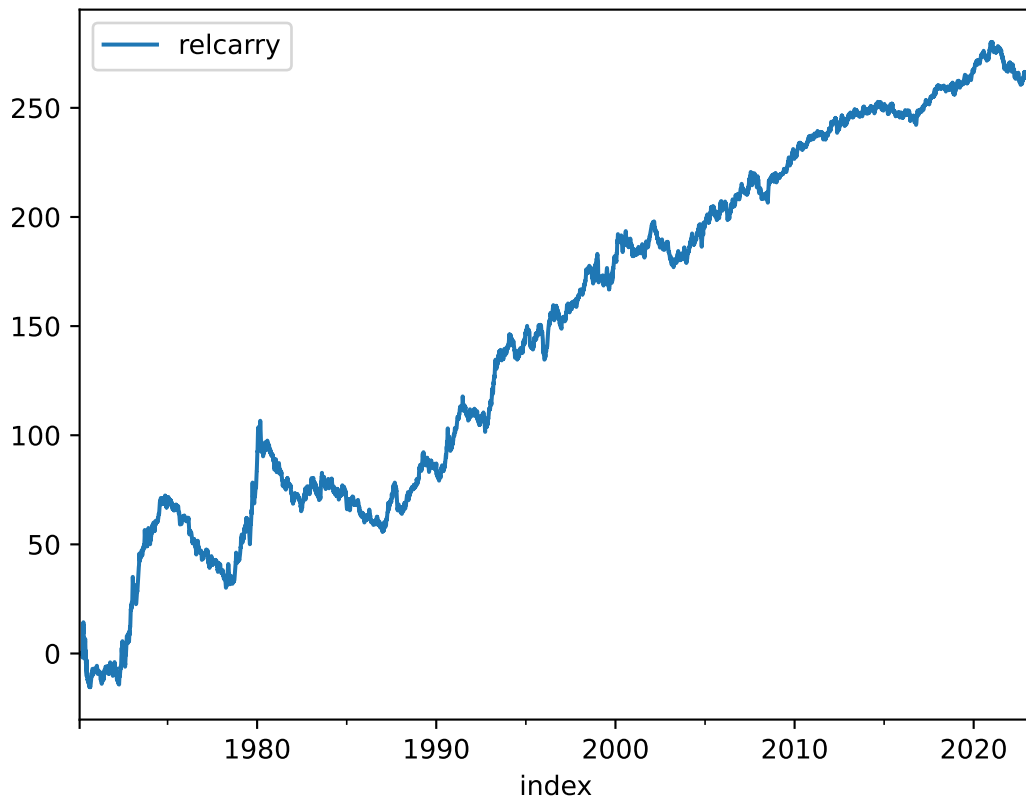


Total Trading Rule P&L for period '99Y'

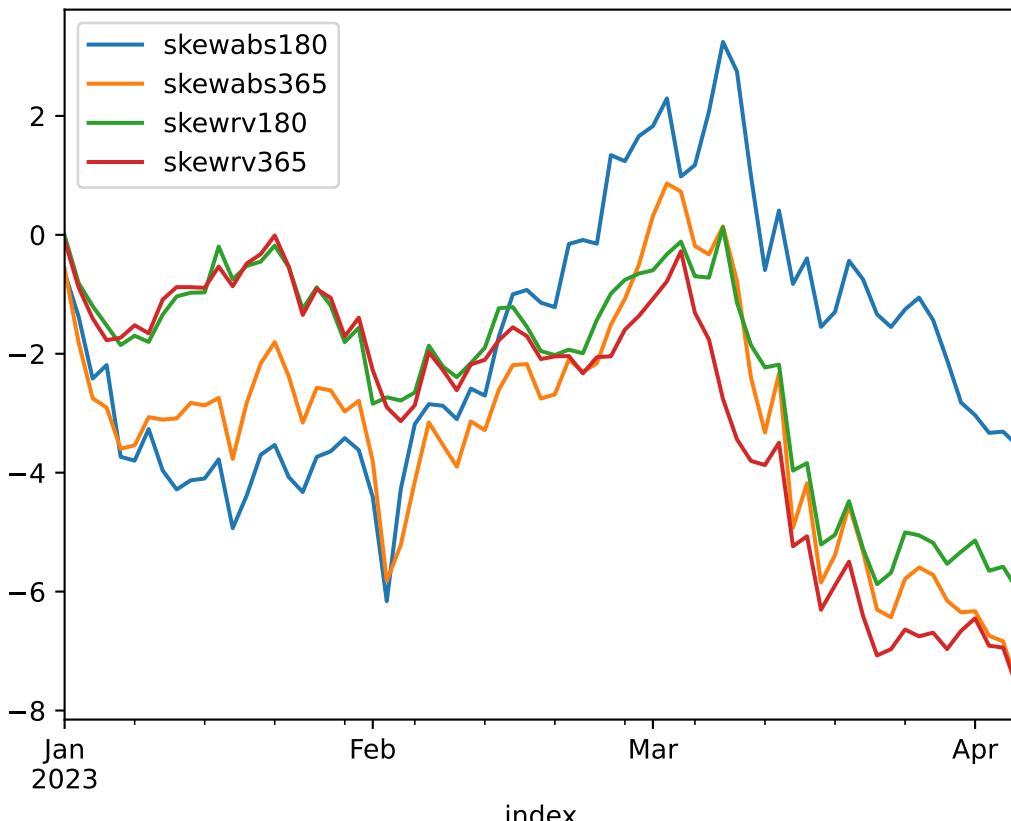
ann. mean {'relcarry': 4.973}

ann. std {'relcarry': 8.96}

ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -13.122, 'skewabs365': -28.077, 'skewrv180': -22.114, 'skewrv365': -28.233}
ann. std {'skewabs180': 12.115, 'skewabs365': 12.086, 'skewrv180': 8.23, 'skewrv365': 7.925}
ann. SR {'skewabs180': -1.08, 'skewabs365': -2.32, 'skewrv180': -2.69, 'skewrv365': -3.56}

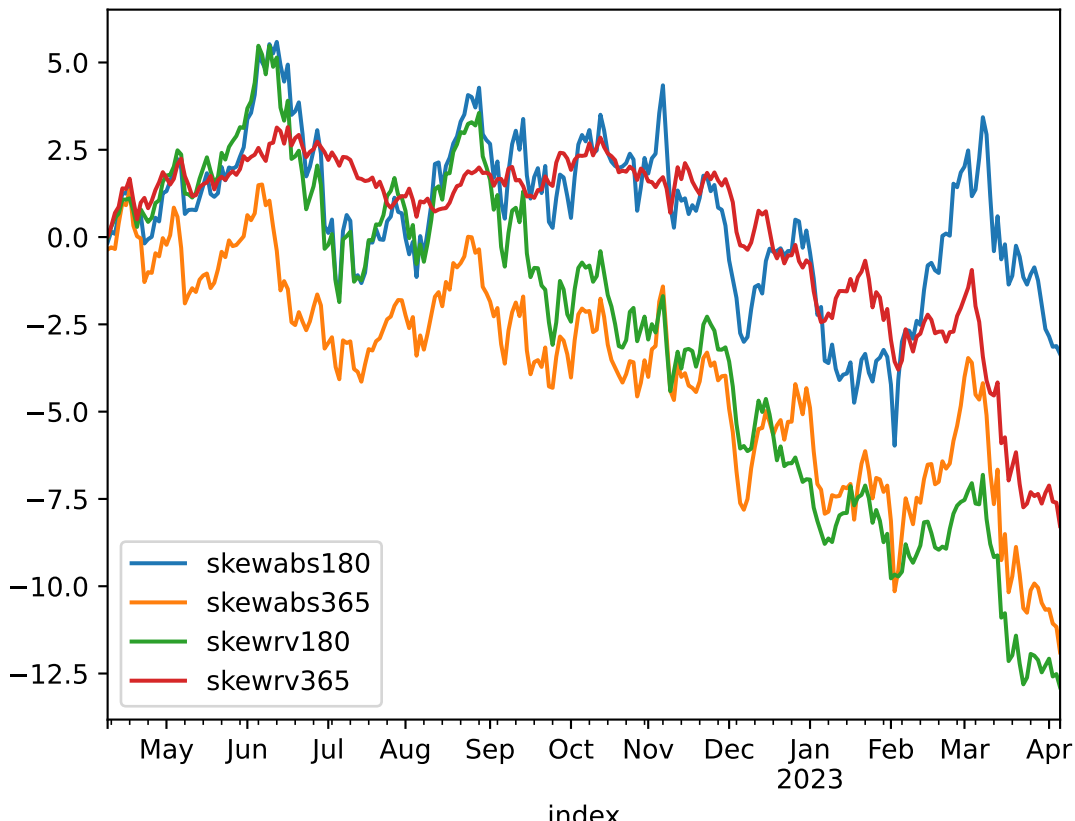


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -3.297, 'skewabs365': -11.711, 'skewrv180': -12.697, 'skewrv365': -8.149}

ann. std {'skewabs180': 11.035, 'skewabs365': 9.893, 'skewrv180': 9.18, 'skewrv365': 5.591}

ann. SR {'skewabs180': -0.3, 'skewabs365': -1.18, 'skewrv180': -1.38, 'skewrv365': -1.46}

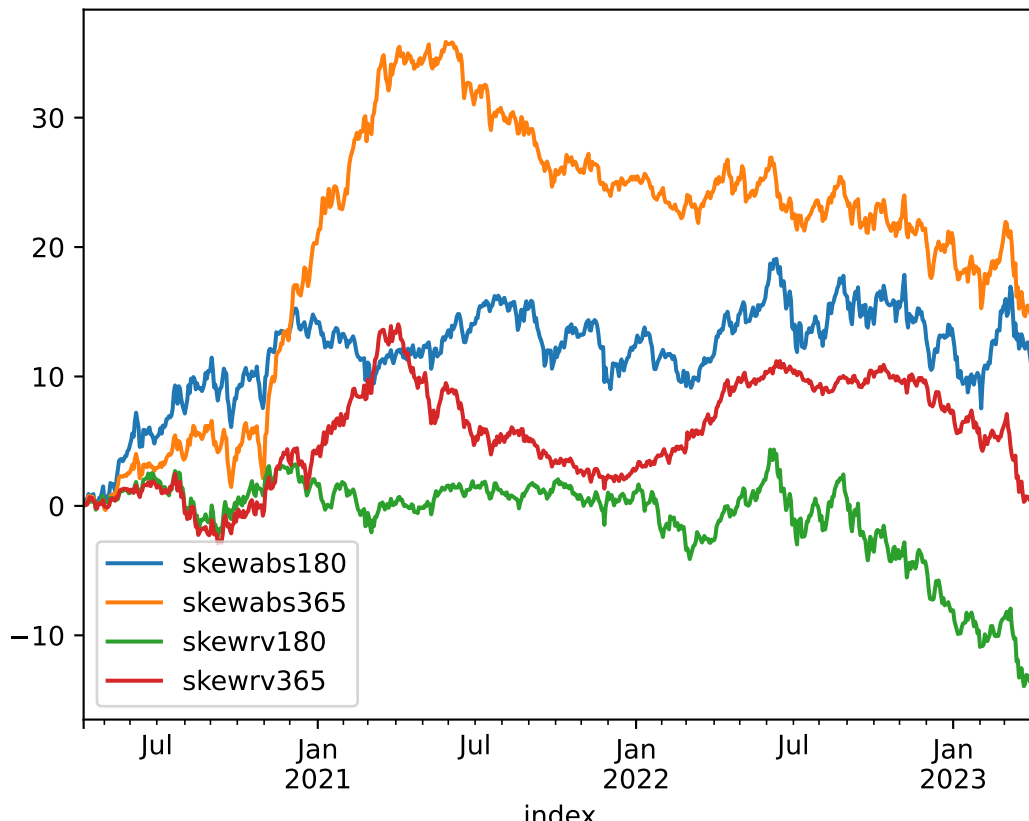


Total Trading Rule P&L for period '3Y'

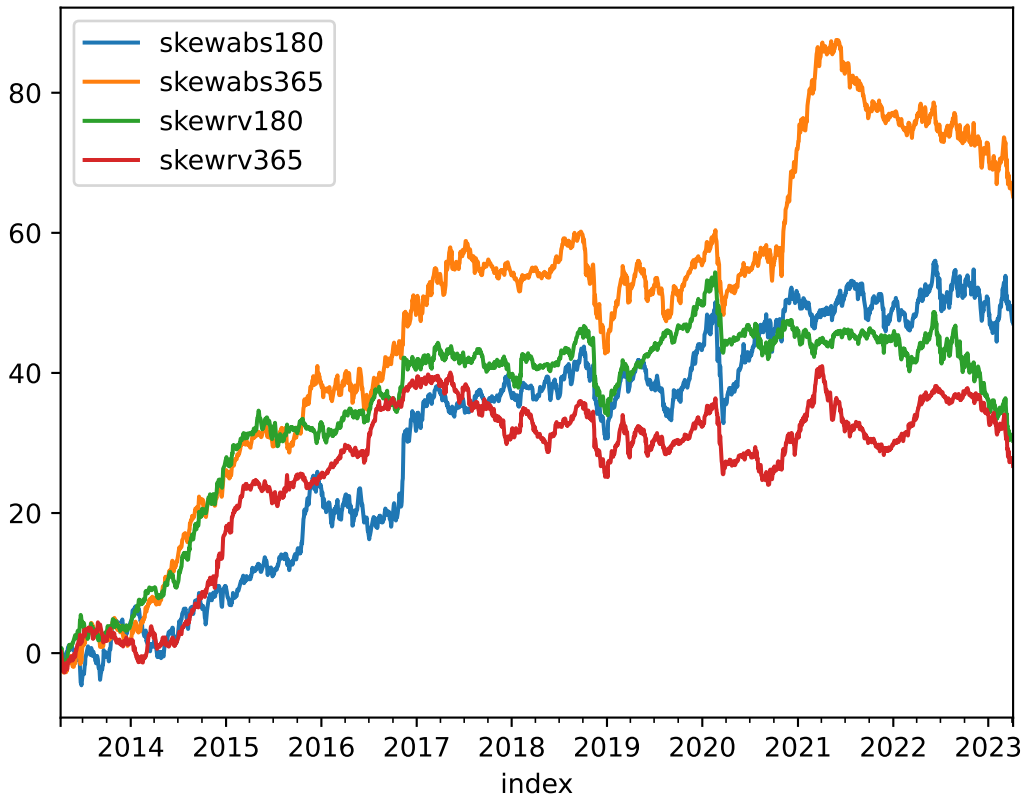
ann. mean {'skewabs180': 3.326, 'skewabs365': 4.425, 'skewrv180': -4.589, 'skewrv365': -0.075}

ann. std {'skewabs180': 9.104, 'skewabs365': 8.839, 'skewrv180': 7.177, 'skewrv365': 6.262}

ann. SR {'skewabs180': 0.37, 'skewabs365': 0.5, 'skewrv180': -0.64, 'skewrv365': -0.01}

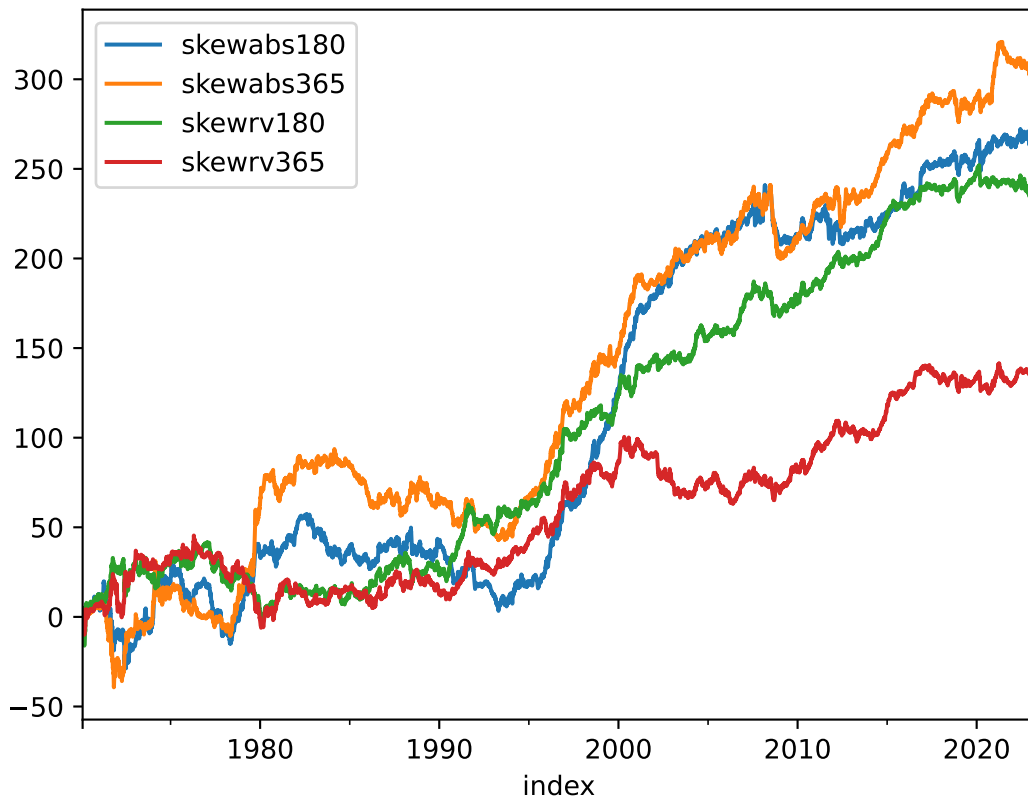


Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.62, 'skewabs365': 6.398, 'skewrv180': 2.974, 'skewrv365': 2.622}
ann. std {'skewabs180': 8.001, 'skewabs365': 7.953, 'skewrv180': 6.382, 'skewrv365': 6.052}
ann. SR {'skewabs180': 0.58, 'skewabs365': 0.8, 'skewrv180': 0.47, 'skewrv365': 0.43}

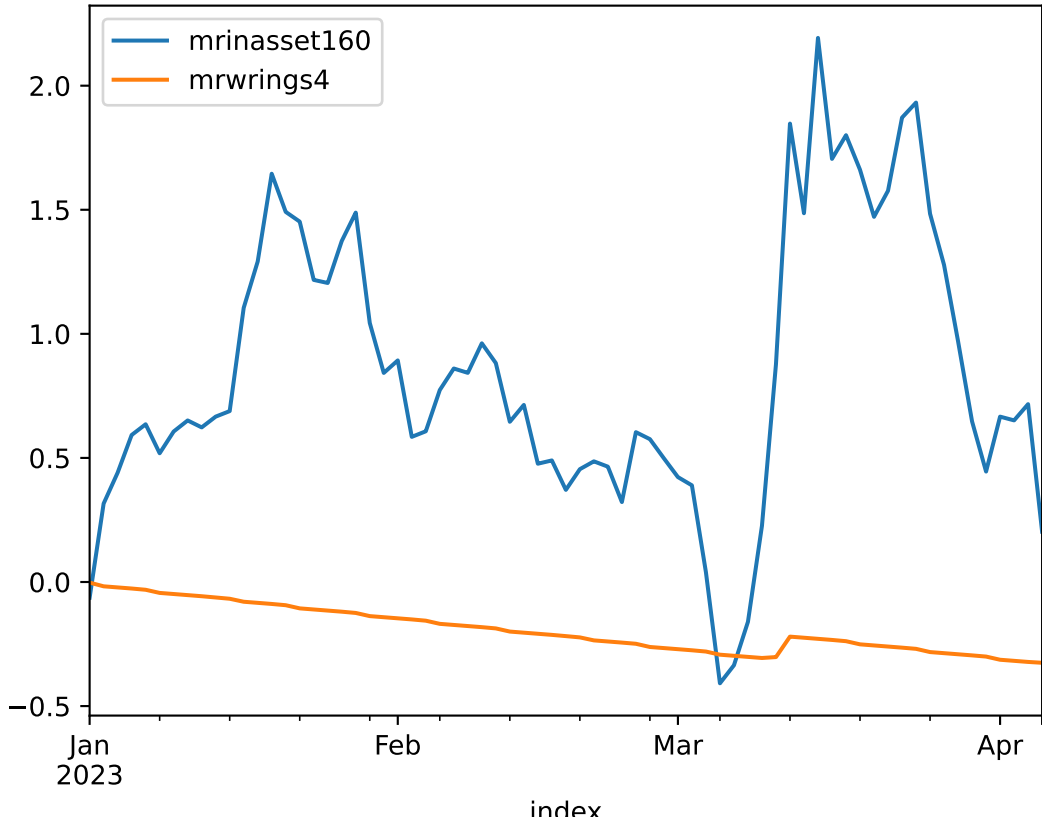


Total Trading Rule P&L for period '99Y'

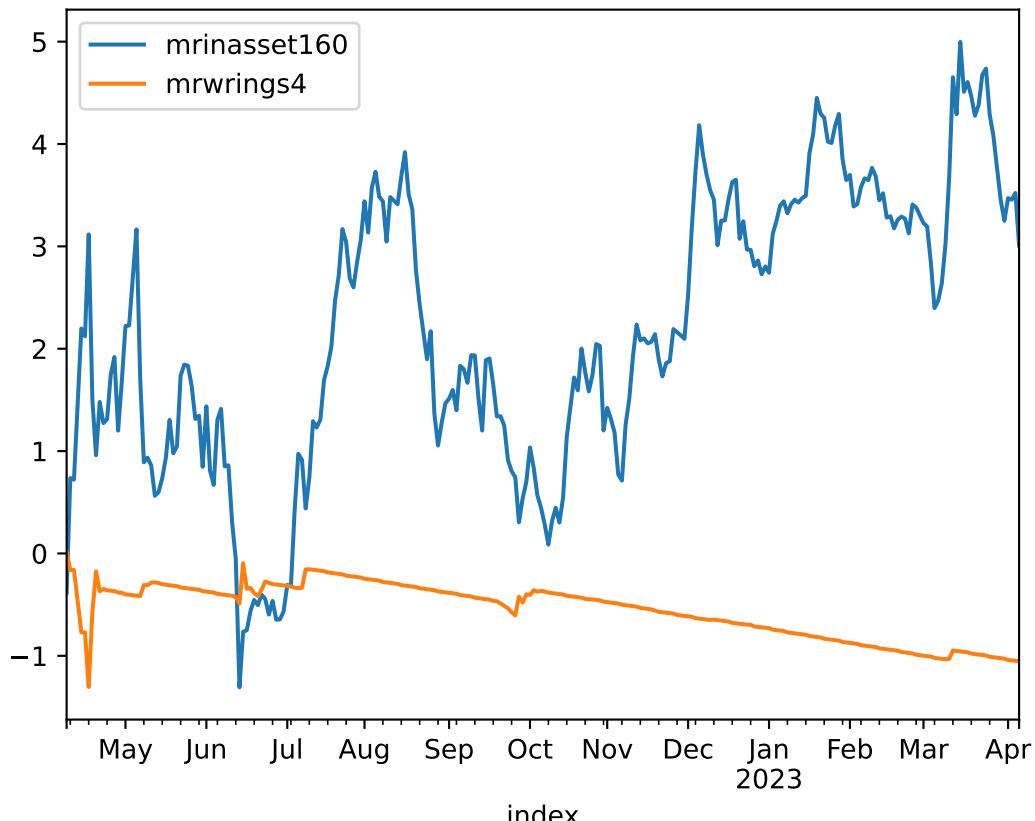
ann. mean	{'skewabs180': 4.856, 'skewabs365': 5.508, 'skewrv180': 4.208, 'skewrv365': 2.348}
ann. std	{'skewabs180': 10.101, 'skewabs365': 9.867, 'skewrv180': 8.751, 'skewrv365': 8.122}
ann. SR	{'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



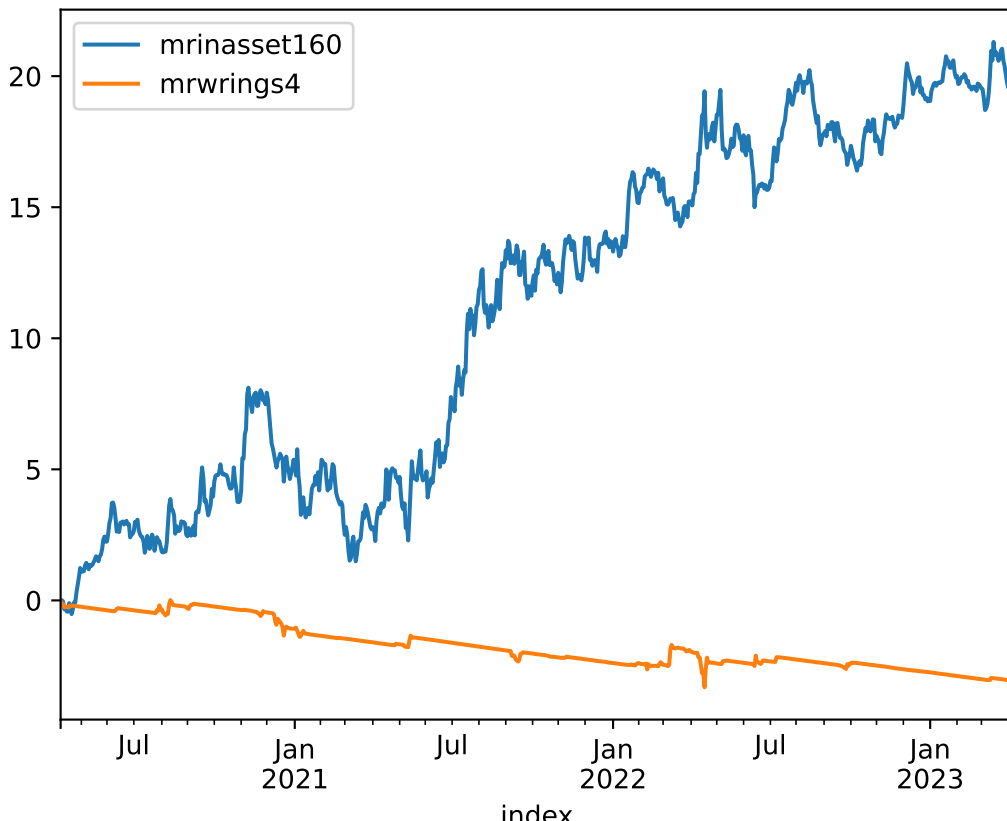
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.752, 'mrwrings4': -1.208}
ann. std {'mrinasset160': 4.348, 'mrwrings4': 0.179}
ann. SR {'mrinasset160': 0.17, 'mrwrings4': -6.74}



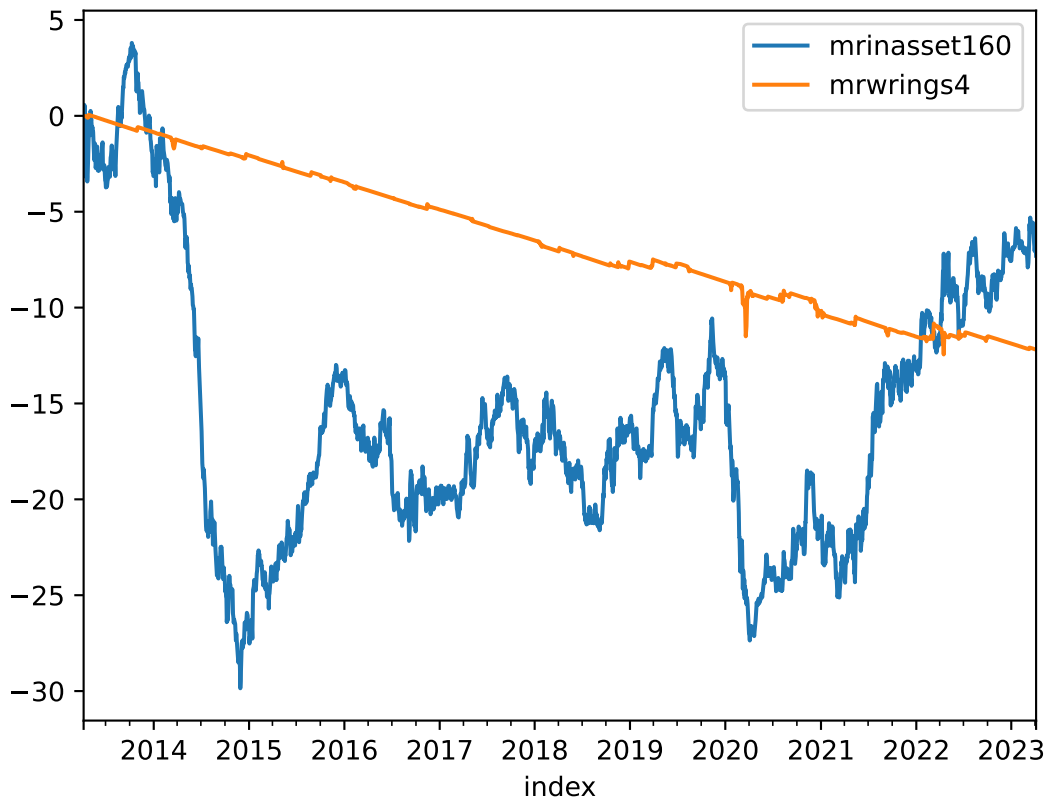
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 2.961, 'mrwrings4': -1.037}
ann. std {'mrinasset160': 5.753, 'mrwrings4': 1.248}
ann. SR {'mrinasset160': 0.51, 'mrwrings4': -0.83}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.323, 'mrwrings4': -1.003}
ann. std {'mrinasset160': 6.256, 'mrwrings4': 1.021}
ann. SR {'mrinasset160': 1.01, 'mrwrings4': -0.98}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.716, 'mrwrings4': -1.196}
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': -3.562, 'mrwrings4': -2.121}
ann. std {'mrinasset160': 9.871, 'mrwrings4': 2.089}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.02}

