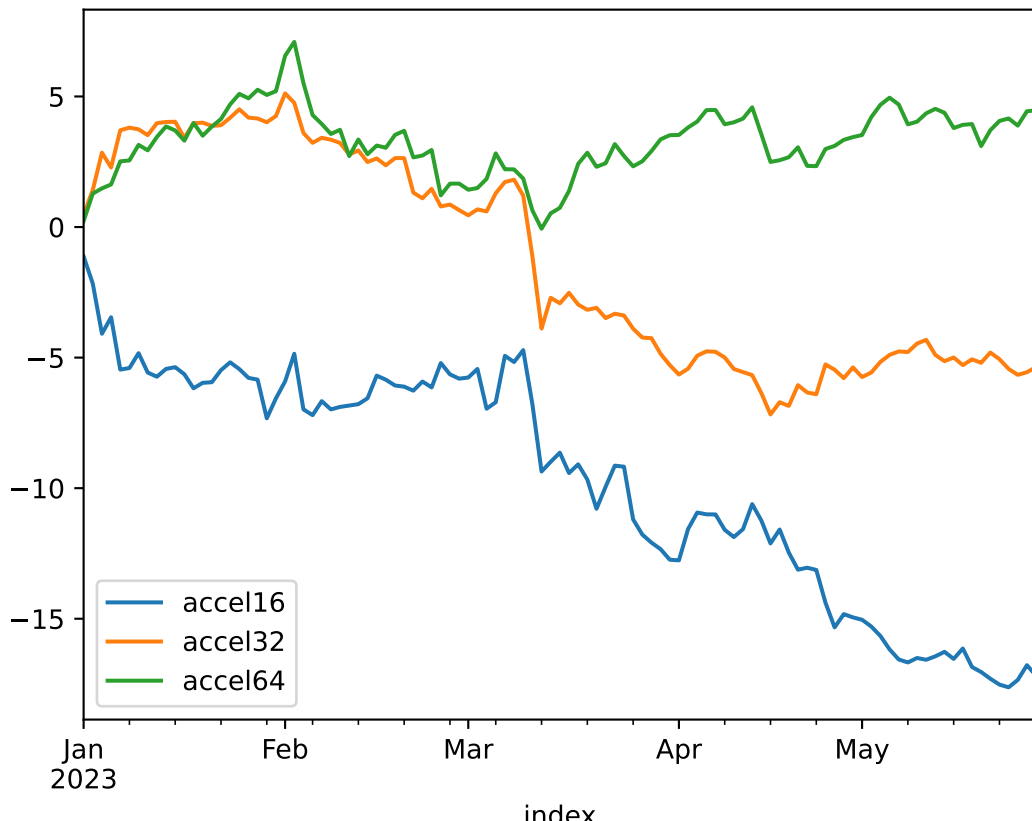
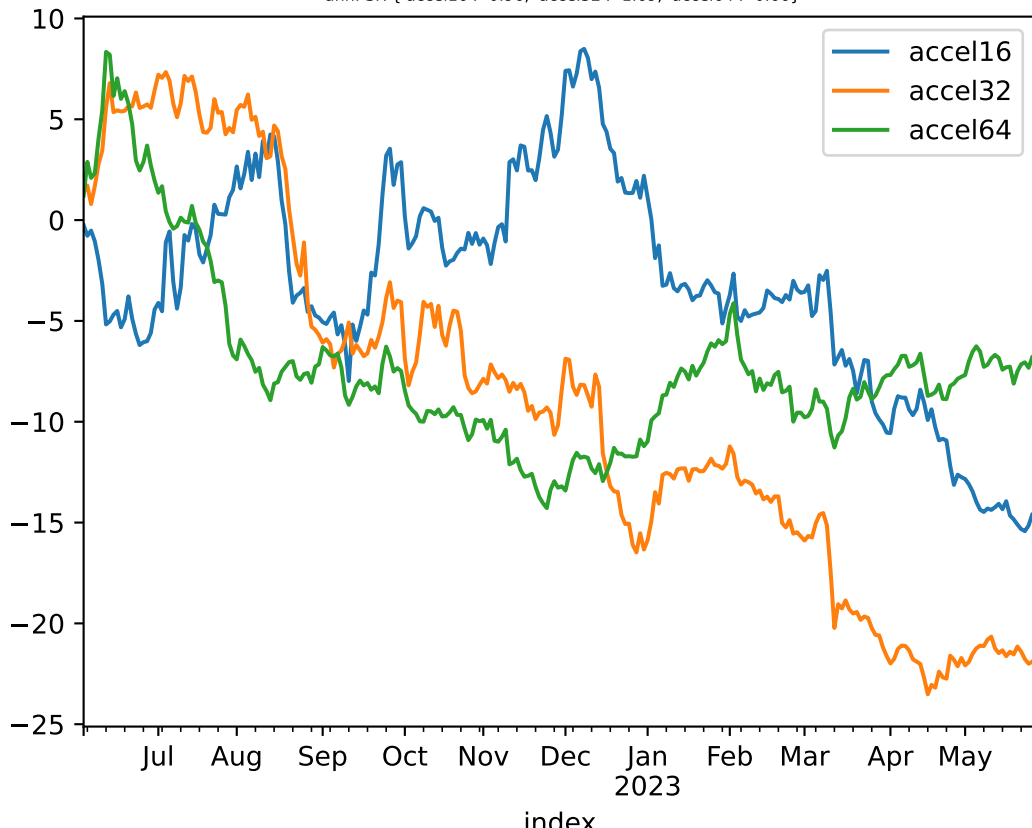


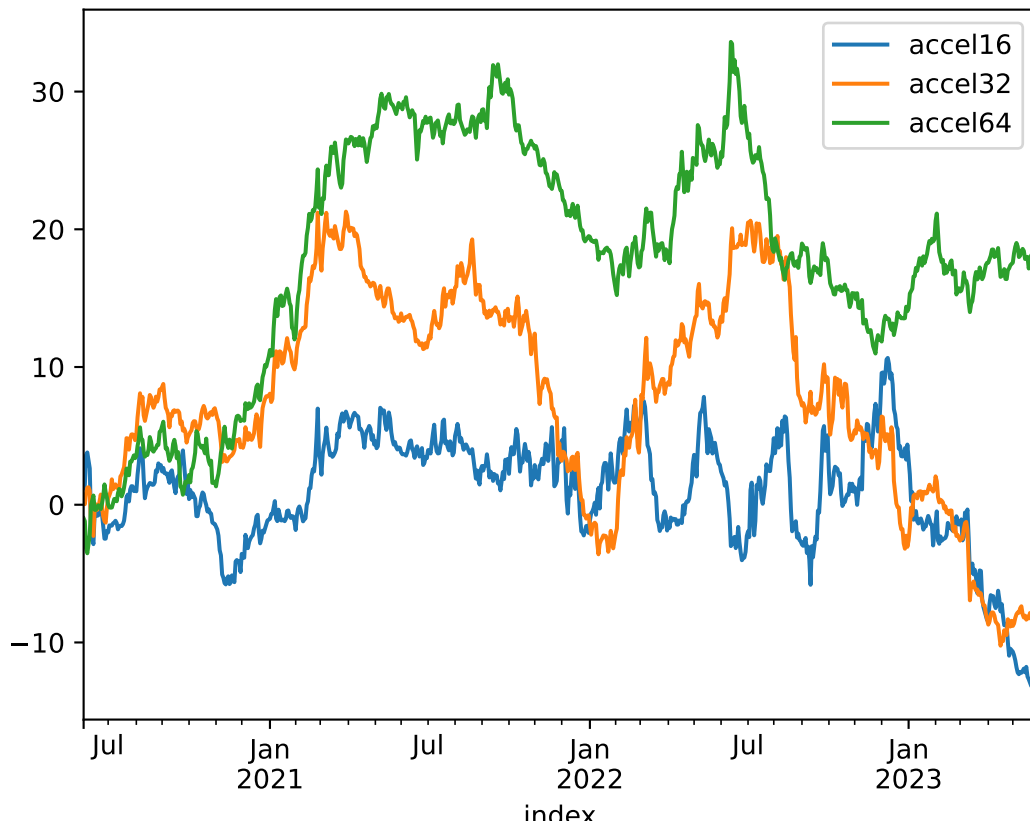
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -41.891, 'accel32': -13.074, 'accel64': 10.891}
ann. std {'accel16': 11.888, 'accel32': 9.308, 'accel64': 8.912}
ann. SR {'accel16': -3.52, 'accel32': -1.4, 'accel64': 1.22}



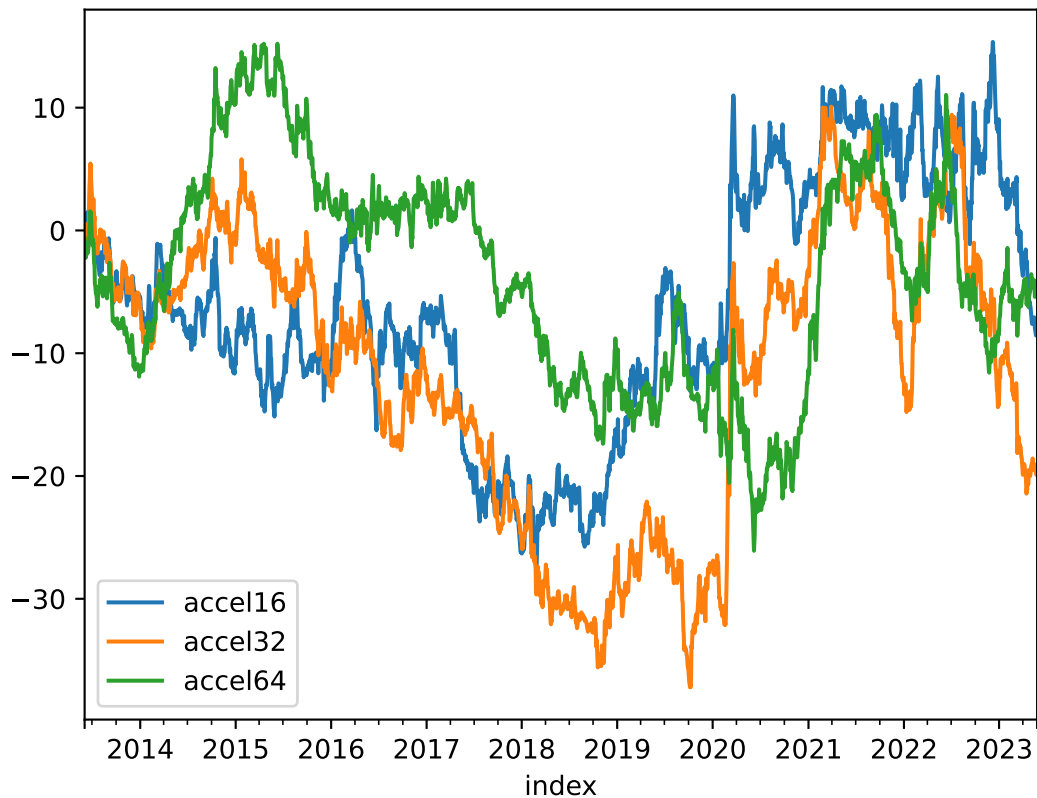
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -14.982, 'accel32': -21.701, 'accel64': -6.743}
ann. std {'accel16': 15.536, 'accel32': 12.814, 'accel64': 10.233}
ann. SR {'accel16': -0.96, 'accel32': -1.69, 'accel64': -0.66}



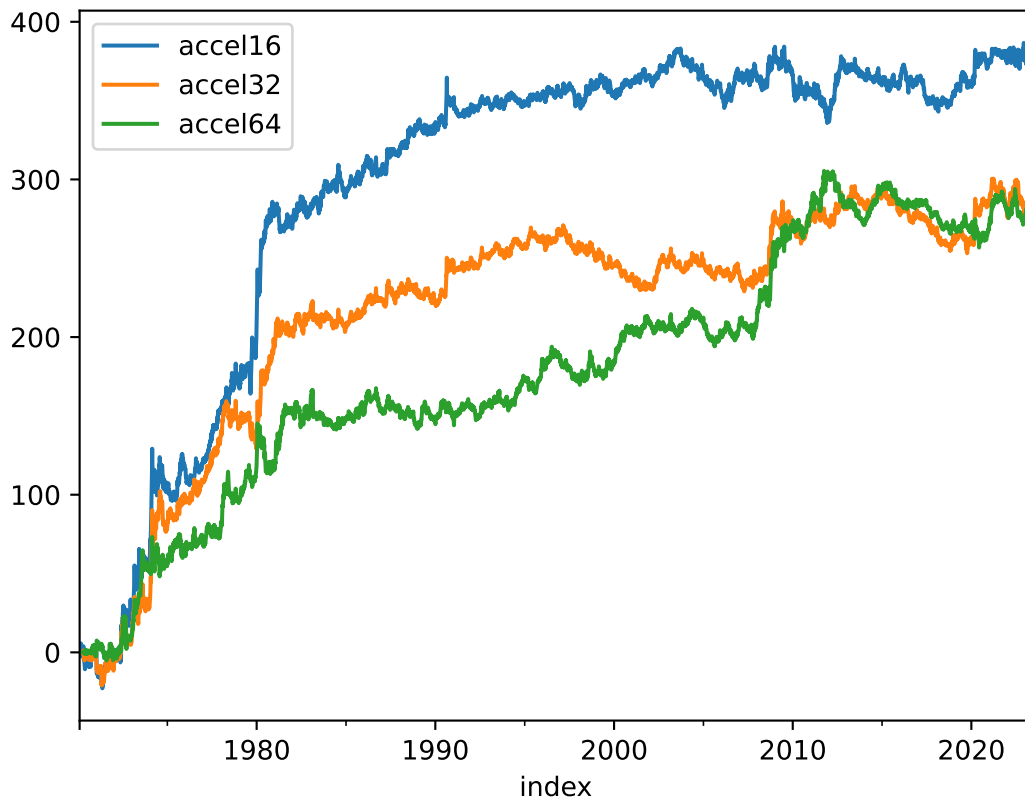
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -4.216, 'accel32': -2.77, 'accel64': 6.094}
ann. std {'accel16': 13.508, 'accel32': 11.76, 'accel64': 10.423}
ann. SR {'accel16': -0.31, 'accel32': -0.24, 'accel64': 0.58}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.798, 'accel32': -1.928, 'accel64': -0.397}
ann. std {'accel16': 11.683, 'accel32': 10.664, 'accel64': 9.309}
ann. SR {'accel16': -0.07, 'accel32': -0.18, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.684, 'accel32': 4.984, 'accel64': 5.132}
ann. std {'accel16': 14.121, 'accel32': 12.446, 'accel64': 12.096}
ann. SR {'accel16': 0.47, 'accel32': 0.4, 'accel64': 0.42}

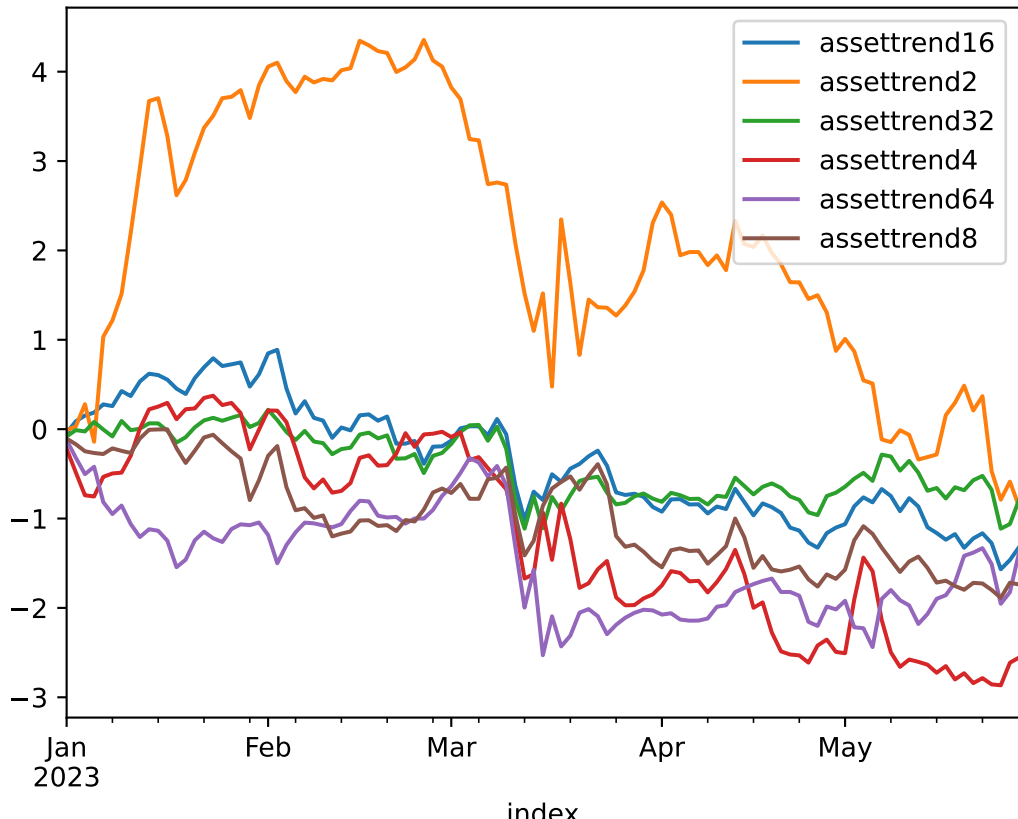


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -3.218, 'assettrend2': -2.119, 'assettrend32': -1.921, 'assettrend4': -6.231, 'assettrend64': -3.361, 'assettrend8': -4.238}

ann. std {'assettrend16': 2.466, 'assettrend2': 6.265, 'assettrend32': 2.36, 'assettrend4': 3.659, 'assettrend64': 3.428, 'assettrend8': 2.726}

ann. SR {'assettrend16': -1.31, 'assettrend2': -0.34, 'assettrend32': -0.81, 'assettrend4': -1.7, 'assettrend64': -0.98, 'assettrend8': -1.55}

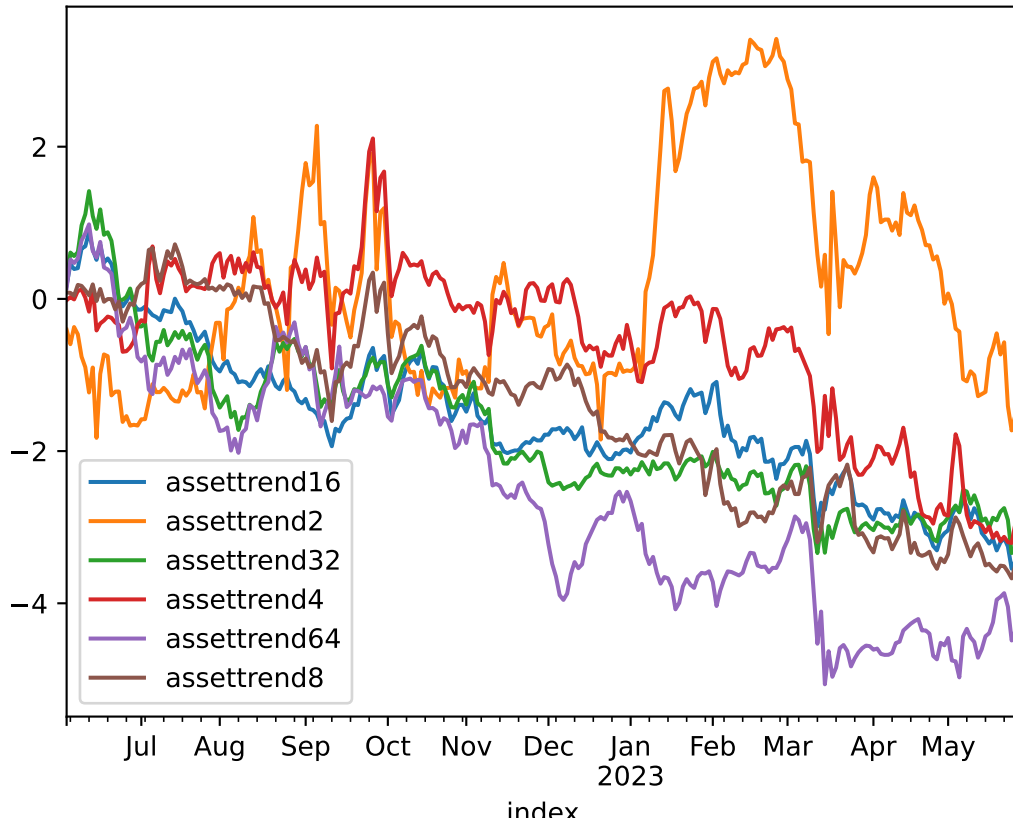


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -3.298, 'assettrend2': -1.808, 'assettrend32': -3.014, 'assettrend4': -2.897, 'assettrend64': -3.914, 'assettrend8': -3.524}

ann. std {'assettrend16': 2.254, 'assettrend2': 6.23, 'assettrend32': 2.483, 'assettrend4': 3.936, 'assettrend64': 3.187, 'assettrend8': 2.656}

ann. SR {'assettrend16': -1.46, 'assettrend2': -0.29, 'assettrend32': -1.21, 'assettrend4': -0.74, 'assettrend64': -1.23, 'assettrend8': -1.33}

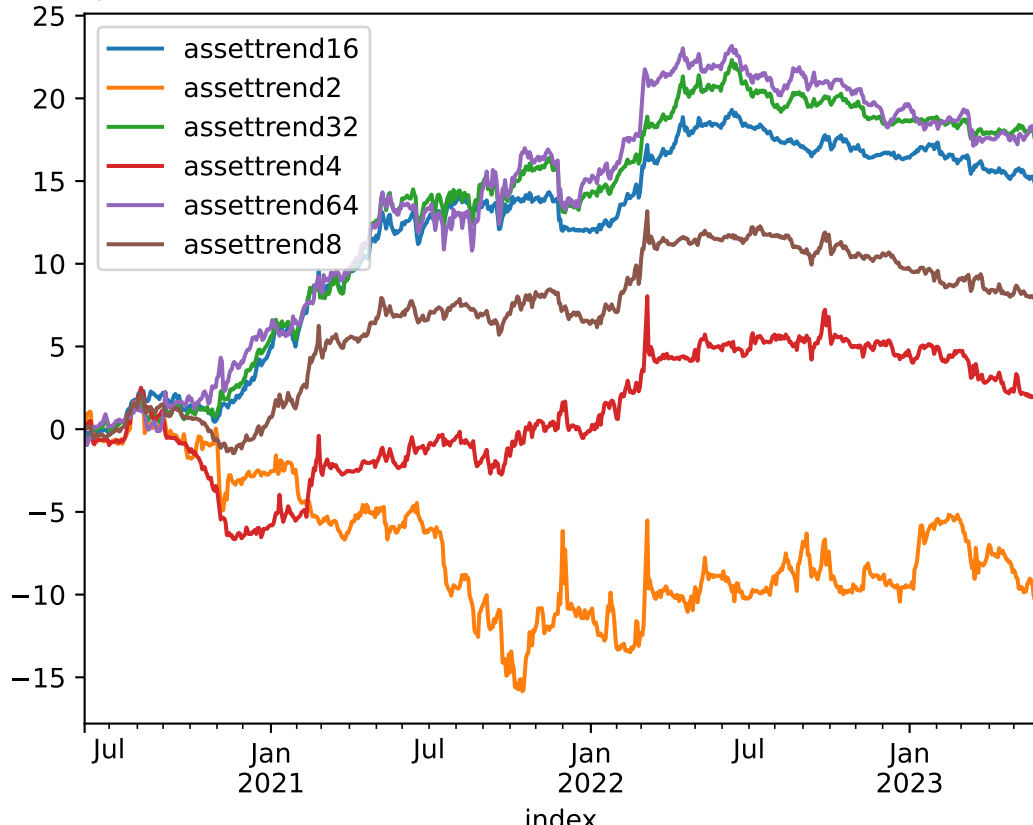


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.978, 'assettrend2': -3.419, 'assettrend32': 5.886, 'assettrend4': 0.73, 'assettrend64': 6.014, 'assettrend8': 2.642}

ann. std {'assettrend16': 3.429, 'assettrend2': 7.853, 'assettrend32': 4.145, 'assettrend4': 4.994, 'assettrend64': 5.037, 'assettrend8': 3.54}

ann. SR {'assettrend16': 1.45, 'assettrend2': -0.44, 'assettrend32': 1.42, 'assettrend4': 0.15, 'assettrend64': 1.19, 'assettrend8': 0.75}

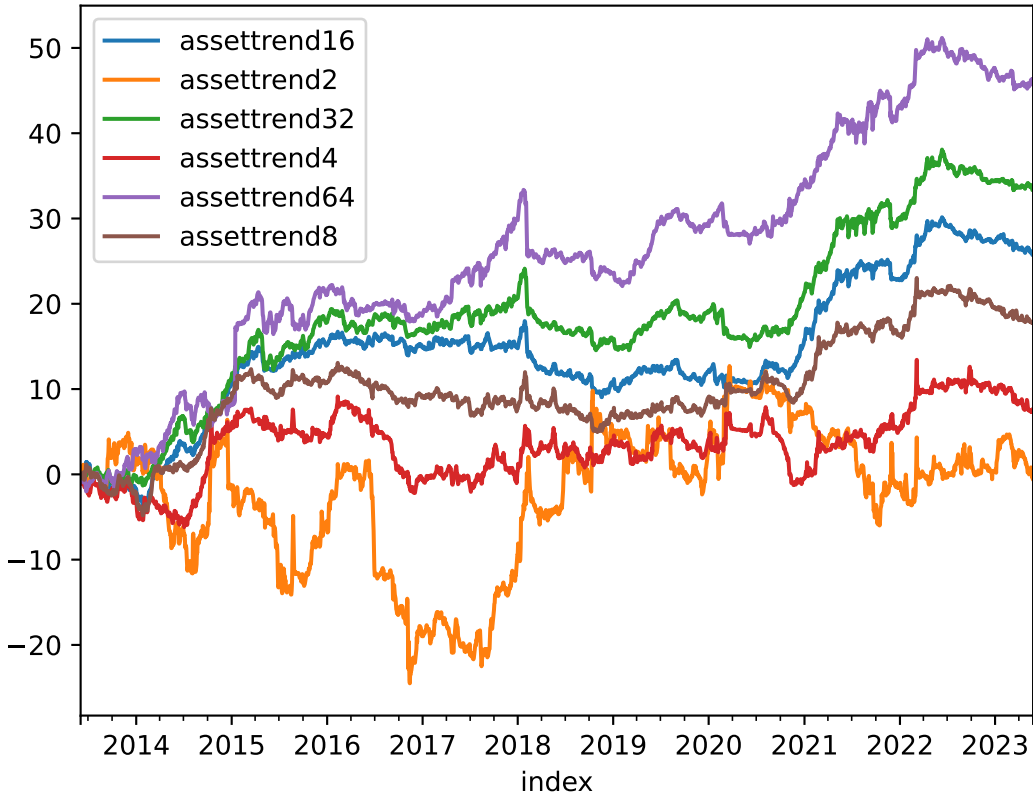


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.552, 'assettrend2': -0.053, 'assettrend32': 3.307, 'assettrend4': 0.748, 'assettrend64': 4.548, 'assettrend8': 1.757}

ann. std {'assettrend16': 3.15, 'assettrend2': 9.775, 'assettrend32': 3.588, 'assettrend4': 4.972, 'assettrend64': 5.196, 'assettrend8': 3.447}

ann. SR {'assettrend16': 0.81, 'assettrend2': -0.01, 'assettrend32': 0.92, 'assettrend4': 0.15, 'assettrend64': 0.88, 'assettrend8': 0.51}

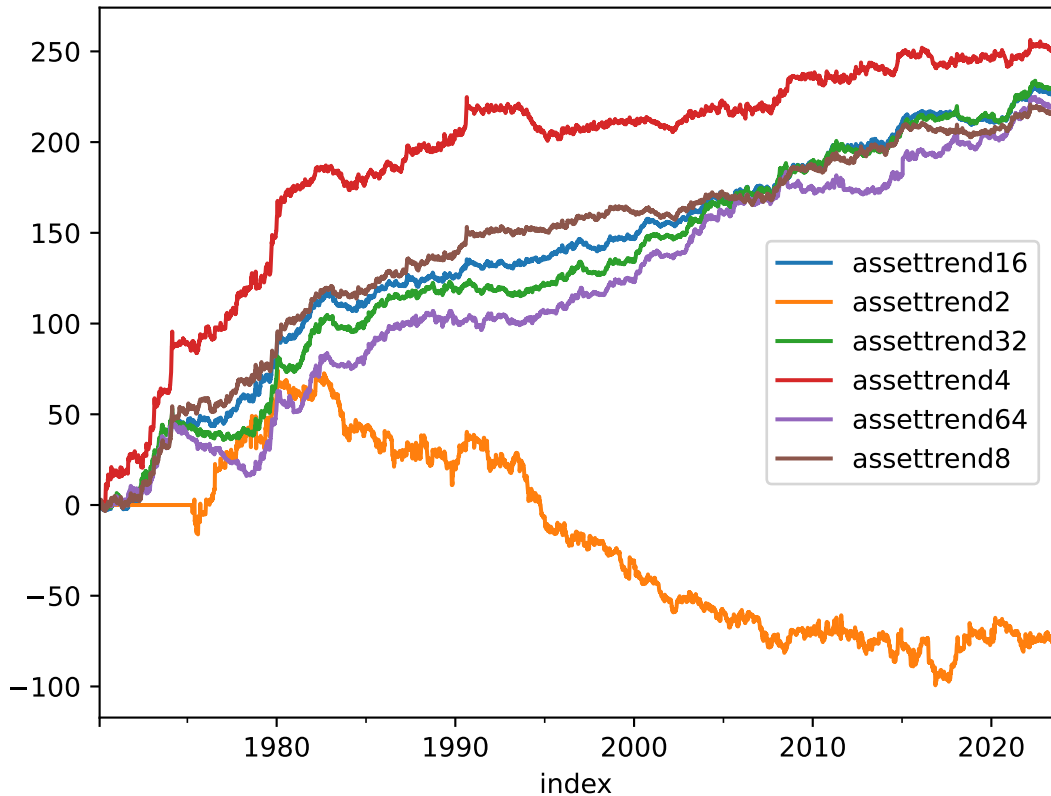


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.166, 'assettrend2': -1.388, 'assettrend32': 4.222, 'assettrend4': 4.611, 'assettrend64': 4.05, 'assettrend8': 3.967}

ann. std {'assettrend16': 4.301, 'assettrend2': 10.254, 'assettrend32': 4.492, 'assettrend4': 6.543, 'assettrend64': 4.993, 'assettrend8': 4.63}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.14, 'assettrend32': 0.94, 'assettrend4': 0.7, 'assettrend64': 0.81, 'assettrend8': 0.86}

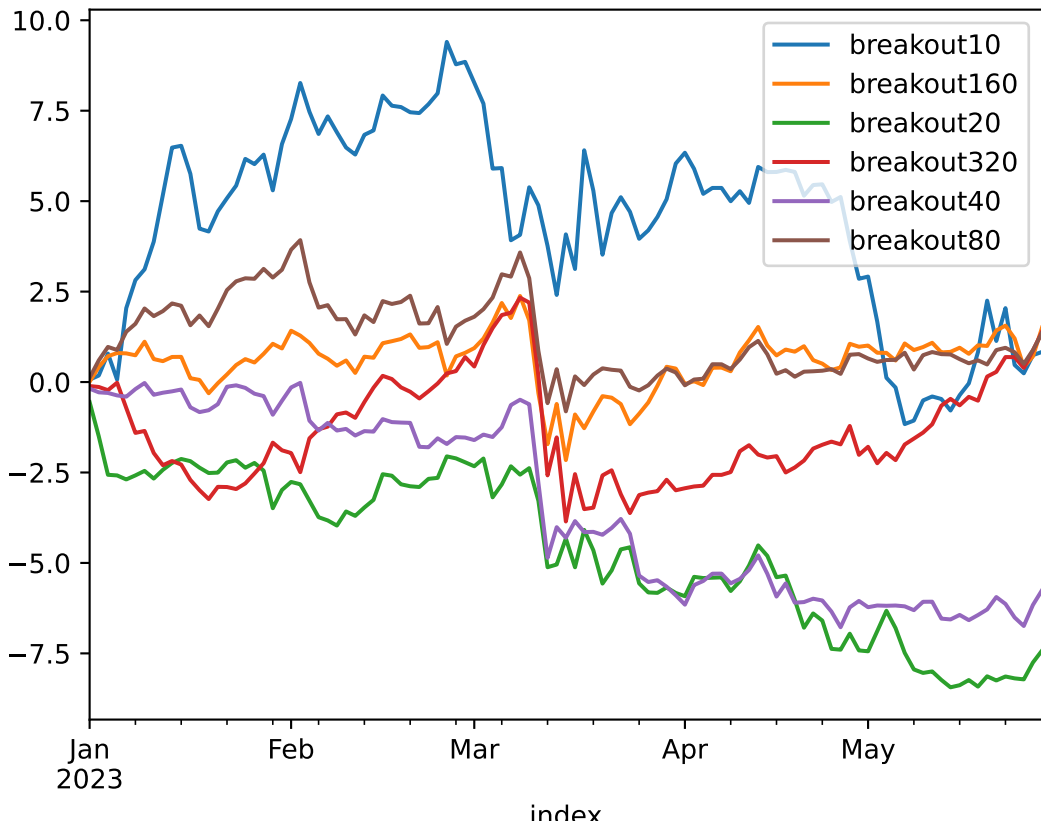


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 2.032, 'breakout160': 3.678, 'breakout20': -18.088, 'breakout320': 3.403, 'breakout40': -14.018, 'breakout80': 3.32}

ann. std {'breakout10': 13.819, 'breakout160': 7.419, 'breakout20': 7.361, 'breakout320': 8.963, 'breakout40': 6.855, 'breakout80': 7.25}

ann. SR {'breakout10': 0.15, 'breakout160': 0.5, 'breakout20': -2.46, 'breakout320': 0.38, 'breakout40': -2.04, 'breakout80': 0.46}

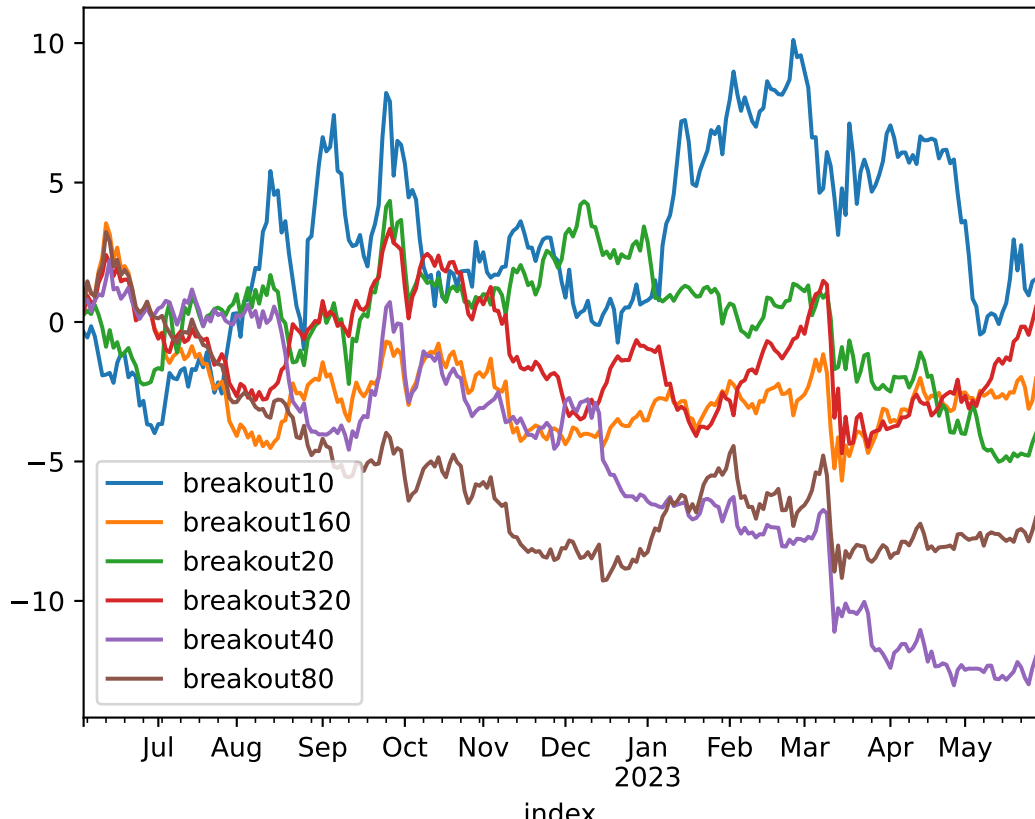


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 1.546, 'breakout160': -2.022, 'breakout20': -3.992, 'breakout320': 0.541, 'breakout40': -11.998, 'breakout80': -7.006}

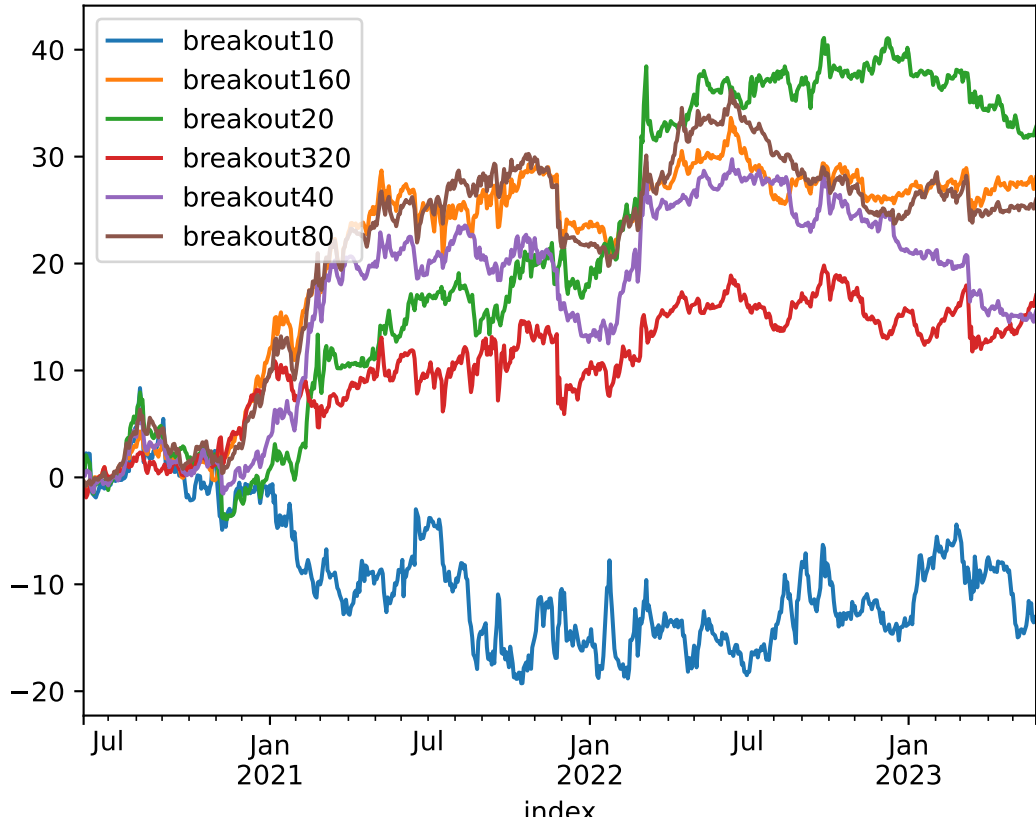
ann. std {'breakout10': 13.442, 'breakout160': 7.017, 'breakout20': 8.39, 'breakout320': 7.645, 'breakout40': 7.164, 'breakout80': 6.549}

ann. SR {'breakout10': 0.12, 'breakout160': -0.29, 'breakout20': -0.48, 'breakout320': 0.07, 'breakout40': -1.67, 'breakout80': -1.07}



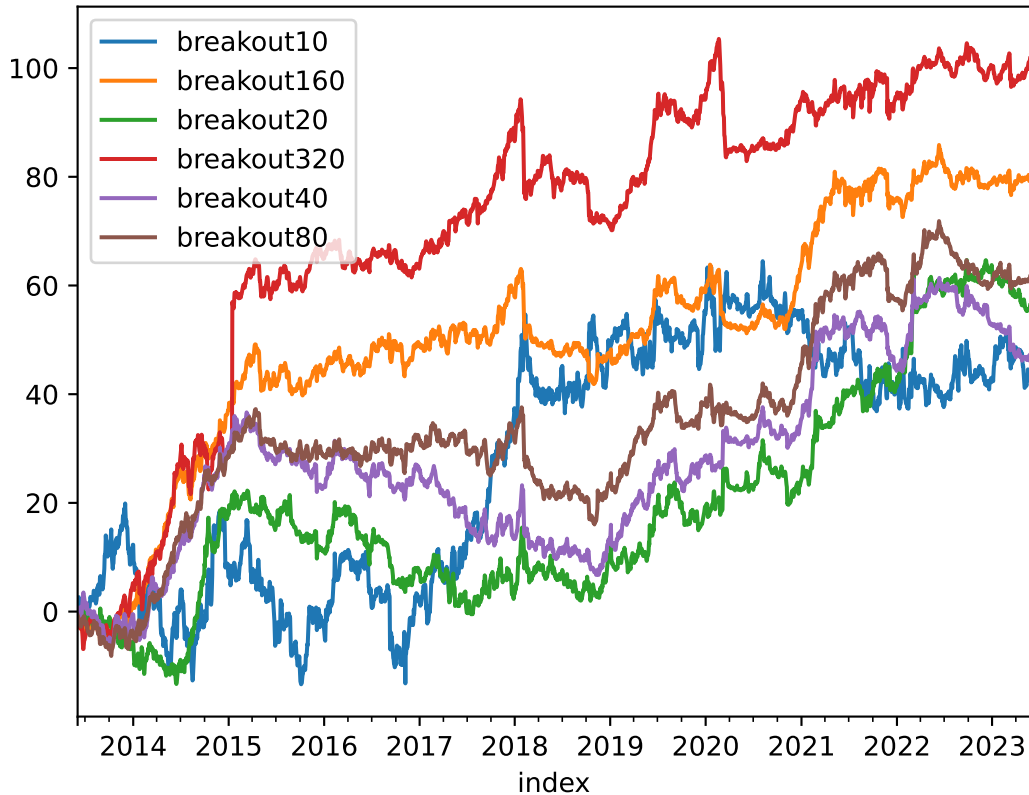
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.269, 'breakout160': 9.234, 'breakout20': 10.782, 'breakout320': 5.6, 'breakout40': 5.115, 'breakout80': 8.552}
ann. std {'breakout10': 15.196, 'breakout160': 9.229, 'breakout20': 11.097, 'breakout320': 9.936, 'breakout40': 9.517, 'breakout80': 8.937}
ann. SR {'breakout10': -0.28, 'breakout160': 1.0, 'breakout20': 0.97, 'breakout320': 0.56, 'breakout40': 0.54, 'breakout80': 0.96}



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

ann. mean {'breakout10': 4.241, 'breakout160': 7.891, 'breakout20': 5.537, 'breakout320': 10.002, 'breakout40': 4.636, 'breakout80': 6.056}
ann. std {'breakout10': 17.799, 'breakout160': 8.853, 'breakout20': 11.045, 'breakout320': 13.086, 'breakout40': 9.357, 'breakout80': 8.706}
ann. SR {'breakout10': 0.24, 'breakout160': 0.89, 'breakout20': 0.5, 'breakout320': 0.76, 'breakout40': 0.5, 'breakout80': 0.7}

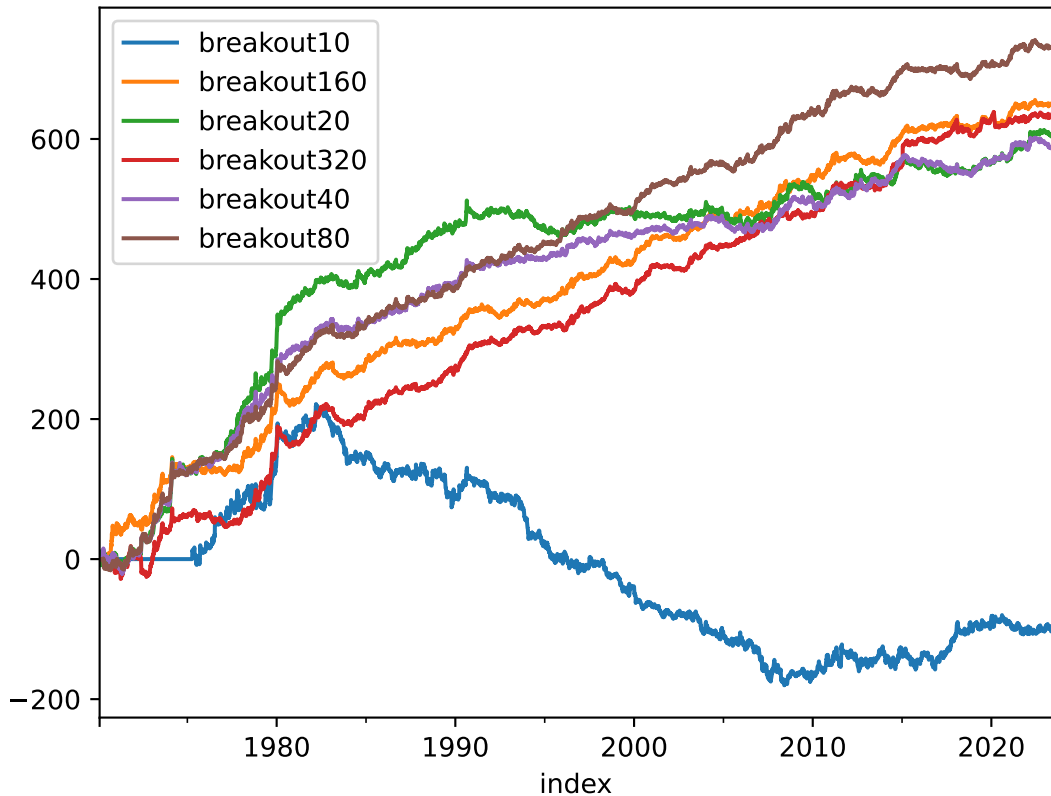


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.864, 'breakout160': 11.968, 'breakout20': 11.126, 'breakout320': 11.689, 'breakout40': 10.818, 'breakout80': 13.459}

ann. std {'breakout10': 21.308, 'breakout160': 11.521, 'breakout20': 14.88, 'breakout320': 12.107, 'breakout40': 12.103, 'breakout80': 11.708}

ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.97, 'breakout40': 0.89, 'breakout80': 1.15}

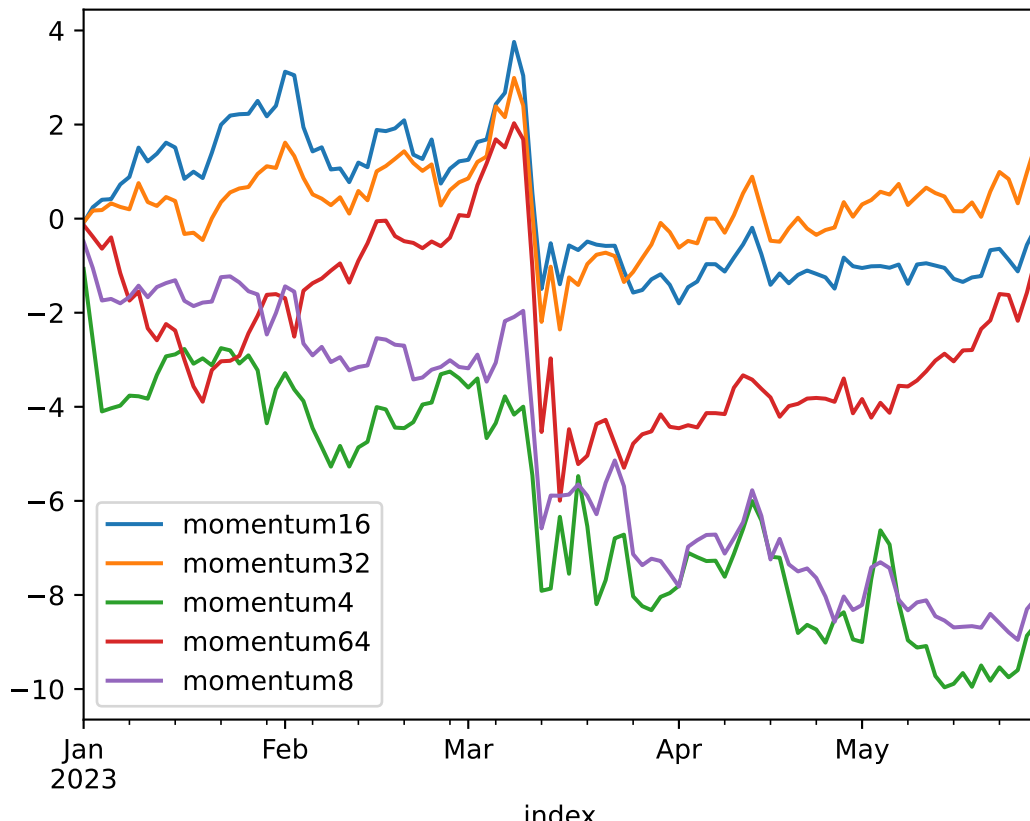


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -0.436, 'momentum32': 3.925, 'momentum4': -21.033, 'momentum64': -1.976, 'momentum8': -19.667}

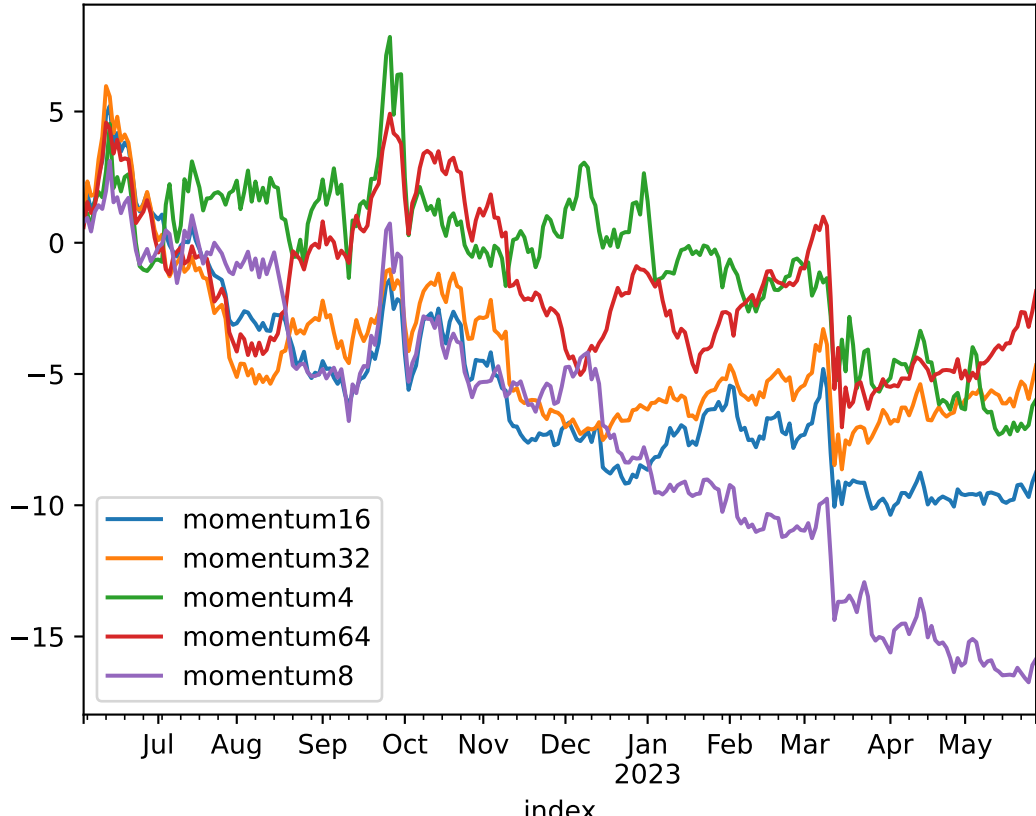
ann. std {'momentum16': 8.071, 'momentum32': 8.206, 'momentum4': 10.755, 'momentum64': 10.869, 'momentum8': 8.174}

ann. SR {'momentum16': -0.05, 'momentum32': 0.48, 'momentum4': -1.96, 'momentum64': -0.18, 'momentum8': -2.41}



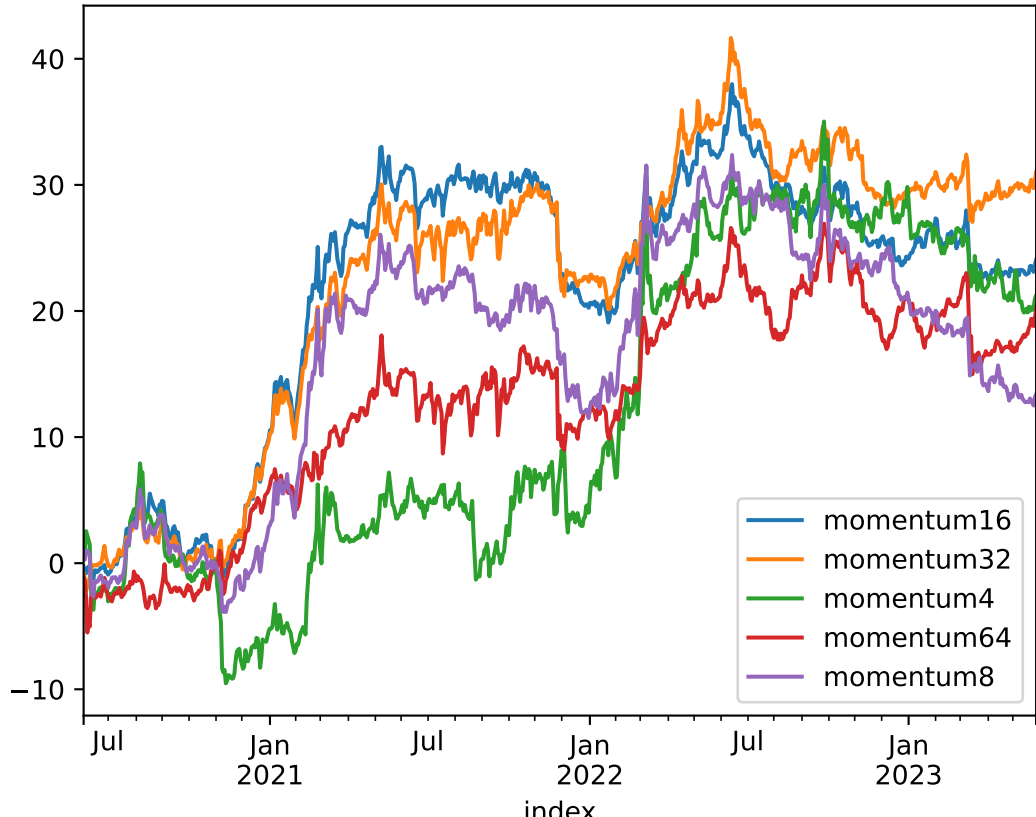
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -8.744, 'momentum32': -4.668, 'momentum4': -5.977, 'momentum64': -1.845, 'momentum8': -15.856}
ann. std {'momentum16': 8.547, 'momentum32': 8.846, 'momentum4': 13.189, 'momentum64': 10.237, 'momentum8': 9.746}
ann. SR {'momentum16': -1.02, 'momentum32': -0.53, 'momentum4': -0.45, 'momentum64': -0.18, 'momentum8': -1.63}



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

ann. mean {'momentum16': 7.911, 'momentum32': 10.207, 'momentum4': 6.979, 'momentum64': 6.636, 'momentum8': 4.407}
ann. std {'momentum16': 10.145, 'momentum32': 10.399, 'momentum4': 14.731, 'momentum64': 10.846, 'momentum8': 11.468}
ann. SR {'momentum16': 0.78, 'momentum32': 0.98, 'momentum4': 0.47, 'momentum64': 0.61, 'momentum8': 0.38}

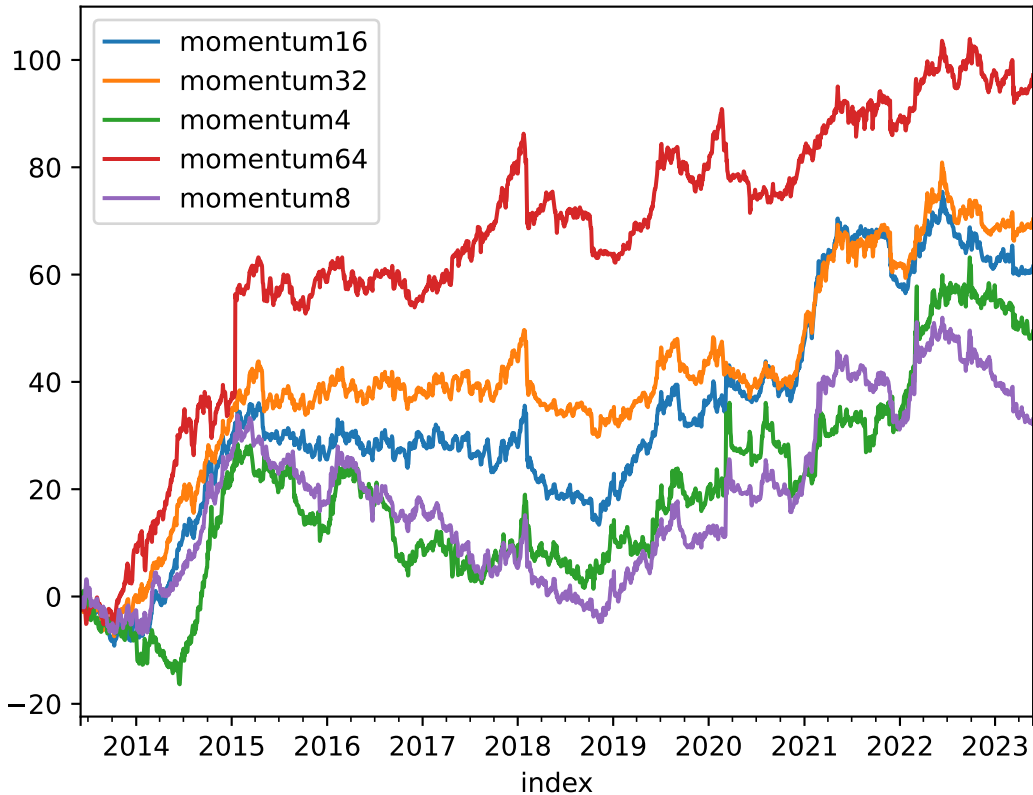


Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 6.041, 'momentum32': 6.905, 'momentum4': 4.854, 'momentum64': 9.548, 'momentum8': 3.242}

ann. std {'momentum16': 9.63, 'momentum32': 9.256, 'momentum4': 13.672, 'momentum64': 11.876, 'momentum8': 10.83}

ann. SR {'momentum16': 0.63, 'momentum32': 0.75, 'momentum4': 0.36, 'momentum64': 0.8, 'momentum8': 0.3}

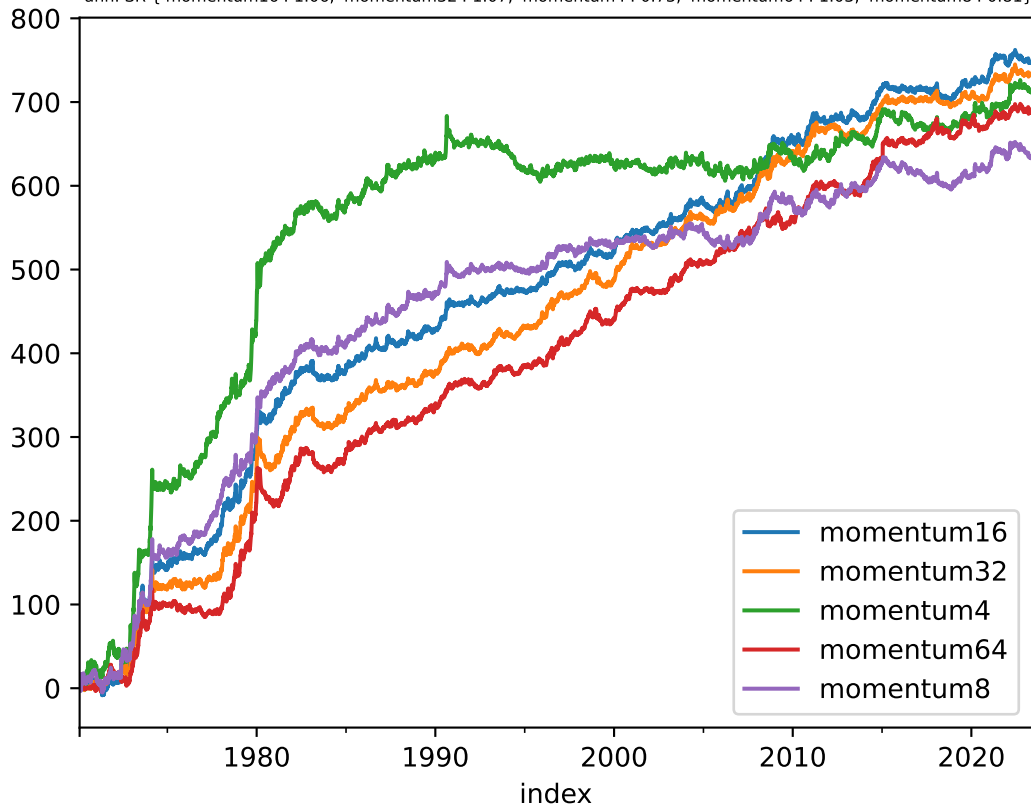


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.773, 'momentum32': 13.515, 'momentum4': 13.113, 'momentum64': 12.721, 'momentum8': 11.659}

ann. std {'momentum16': 13.037, 'momentum32': 12.601, 'momentum4': 17.882, 'momentum64': 12.323, 'momentum8': 14.321}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.73, 'momentum64': 1.03, 'momentum8': 0.81}

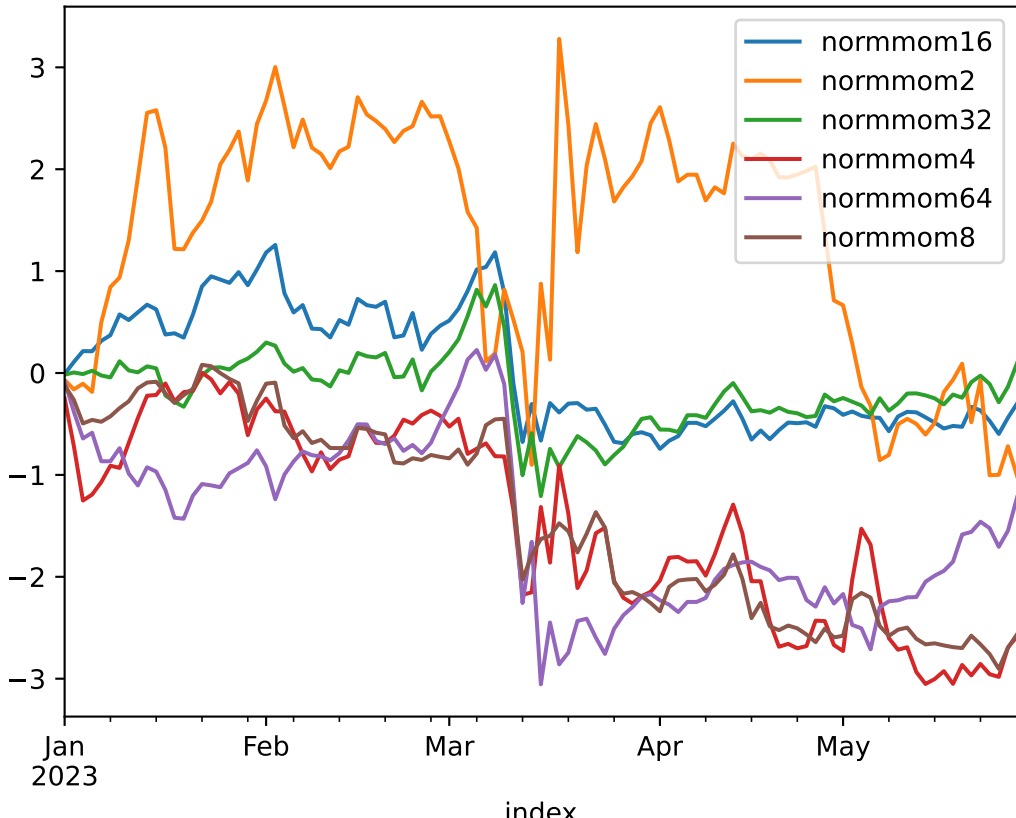


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -0.73, 'normmom2': -2.465, 'normmom32': 0.239, 'normmom4': -6.302, 'normmom64': -2.976, 'normmom8': -6.249}

ann. std {'normmom16': 2.894, 'normmom2': 8.539, 'normmom32': 2.862, 'normmom4': 4.46, 'normmom64': 4.285, 'normmom8': 2.913}

ann. SR {'normmom16': -0.25, 'normmom2': -0.29, 'normmom32': 0.08, 'normmom4': -1.41, 'normmom64': -0.69, 'normmom8': -2.15}

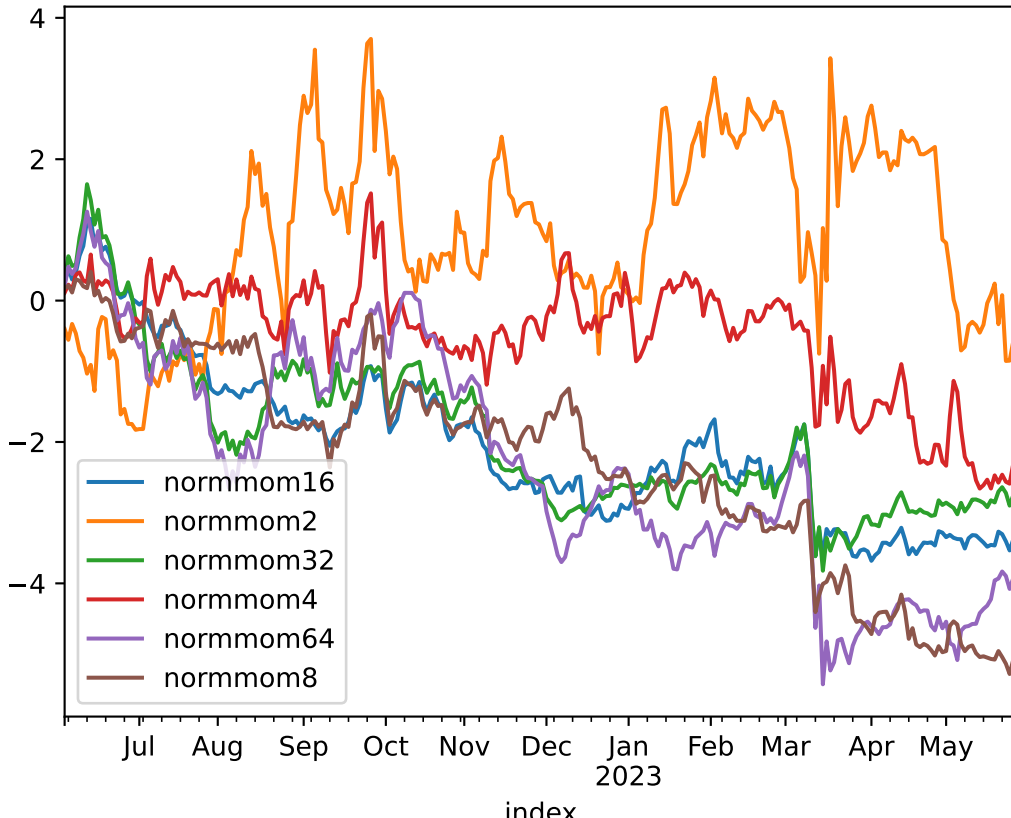


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.236, 'normmom2': -0.861, 'normmom32': -2.515, 'normmom4': -2.192, 'normmom64': -3.593, 'normmom8': -4.942}

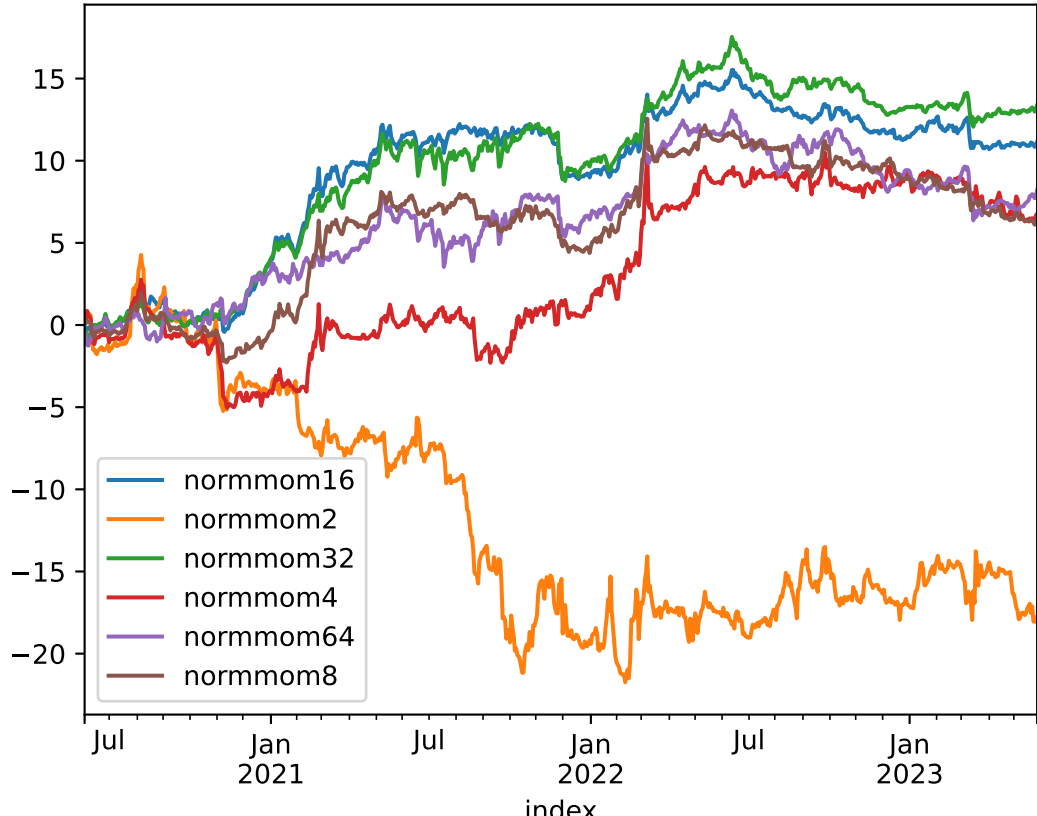
ann. std {'normmom16': 2.551, 'normmom2': 7.562, 'normmom32': 2.848, 'normmom4': 4.358, 'normmom64': 3.869, 'normmom8': 2.905}

ann. SR {'normmom16': -1.27, 'normmom2': -0.11, 'normmom32': -0.88, 'normmom4': -0.5, 'normmom64': -0.93, 'normmom8': -1.7}



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

ann. mean {'normmom16': 3.666, 'normmom2': -5.943, 'normmom32': 4.4, 'normmom4': 2.228, 'normmom64': 2.7, 'normmom8': 2.121}
ann. std {'normmom16': 3.516, 'normmom2': 8.688, 'normmom32': 3.883, 'normmom4': 5.428, 'normmom64': 4.267, 'normmom8': 3.951}
ann. SR {'normmom16': 1.04, 'normmom2': -0.68, 'normmom32': 1.13, 'normmom4': 0.41, 'normmom64': 0.63, 'normmom8': 0.54}

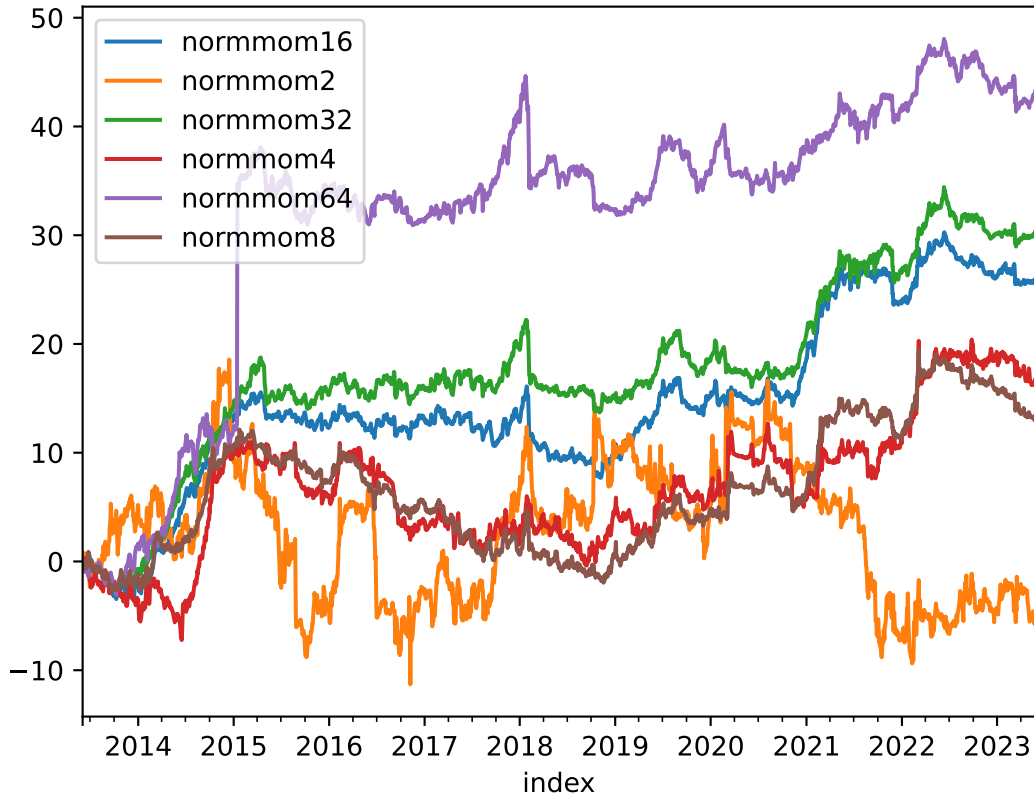


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.543, 'normmom2': -0.559, 'normmom32': 2.974, 'normmom4': 1.641, 'normmom64': 4.245, 'normmom8': 1.31}

ann. std {'normmom16': 3.457, 'normmom2': 10.319, 'normmom32': 3.614, 'normmom4': 5.447, 'normmom64': 8.277, 'normmom8': 3.872}

ann. SR {'normmom16': 0.74, 'normmom2': -0.05, 'normmom32': 0.82, 'normmom4': 0.3, 'normmom64': 0.51, 'normmom8': 0.34}

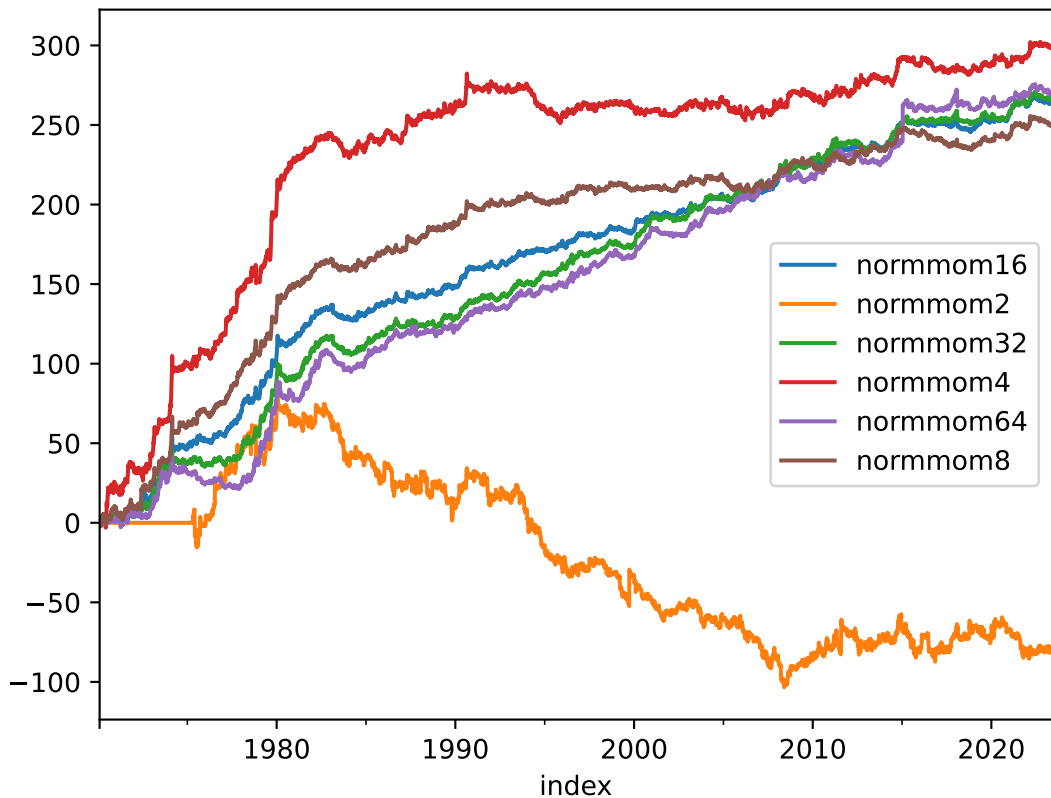


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.856, 'normmom2': -1.504, 'normmom32': 4.915, 'normmom4': 5.494, 'normmom64': 4.985, 'normmom8': 4.594}

ann. std {'normmom16': 4.529, 'normmom2': 11.603, 'normmom32': 4.606, 'normmom4': 7.38, 'normmom64': 5.866, 'normmom8': 5.361}

ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.74, 'normmom64': 0.85, 'normmom8': 0.86}

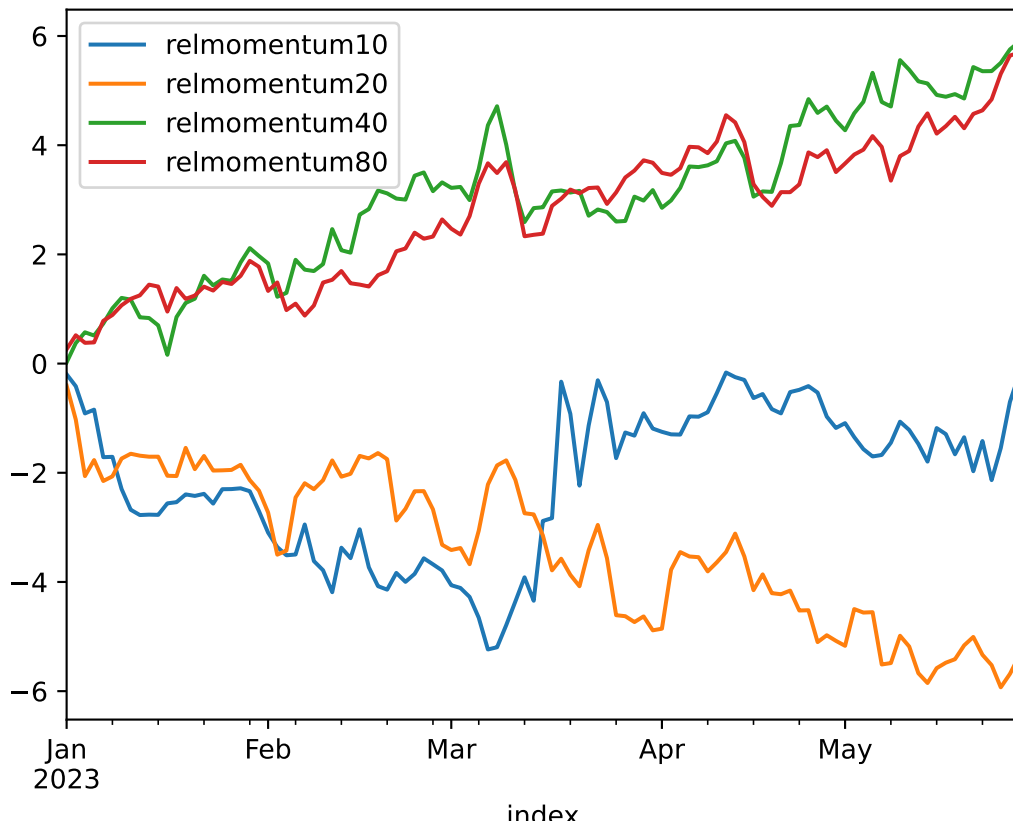


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -0.485, 'relmomentum20': -13.06, 'relmomentum40': 14.365, 'relmomentum80': 13.88}

ann. std {'relmomentum10': 7.84, 'relmomentum20': 6.423, 'relmomentum40': 5.272, 'relmomentum80': 4.384}

ann. SR {'relmomentum10': -0.06, 'relmomentum20': -2.03, 'relmomentum40': 2.72, 'relmomentum80': 3.17}

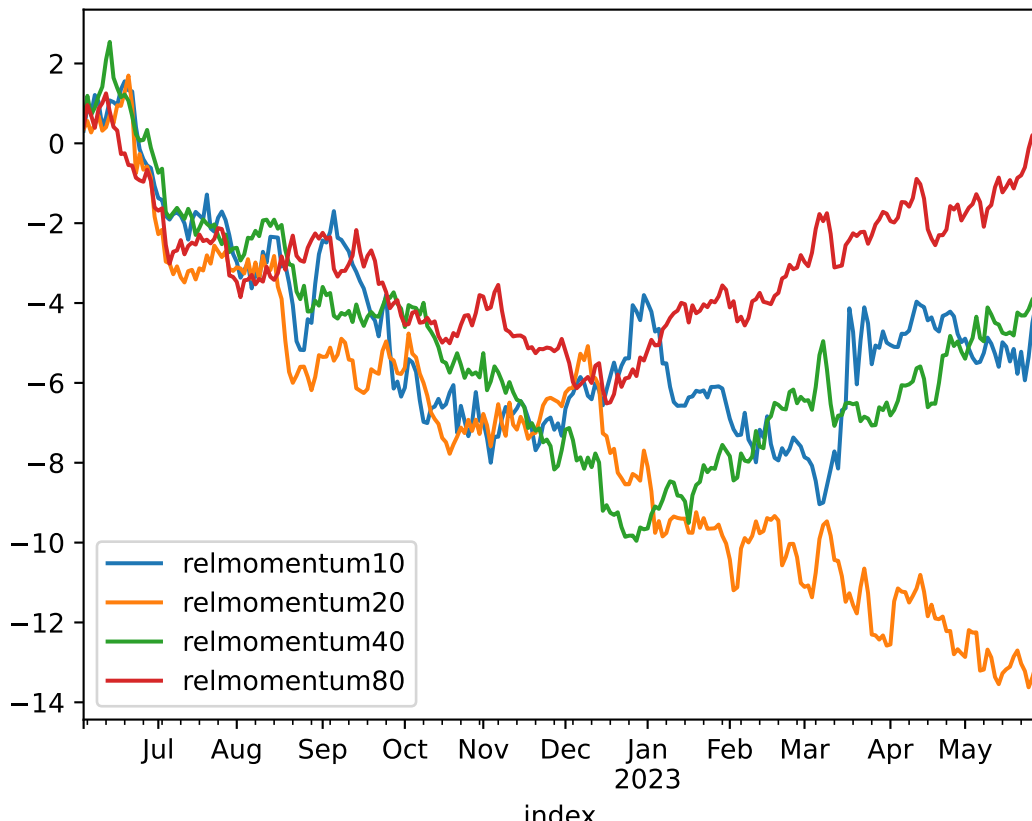


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -4.0, 'relmomentum20': -13.051, 'relmomentum40': -3.776, 'relmomentum80': 0.253}

ann. std {'relmomentum10': 7.292, 'relmomentum20': 6.335, 'relmomentum40': 5.311, 'relmomentum80': 4.637}

ann. SR {'relmomentum10': -0.55, 'relmomentum20': -2.06, 'relmomentum40': -0.71, 'relmomentum80': 0.05}

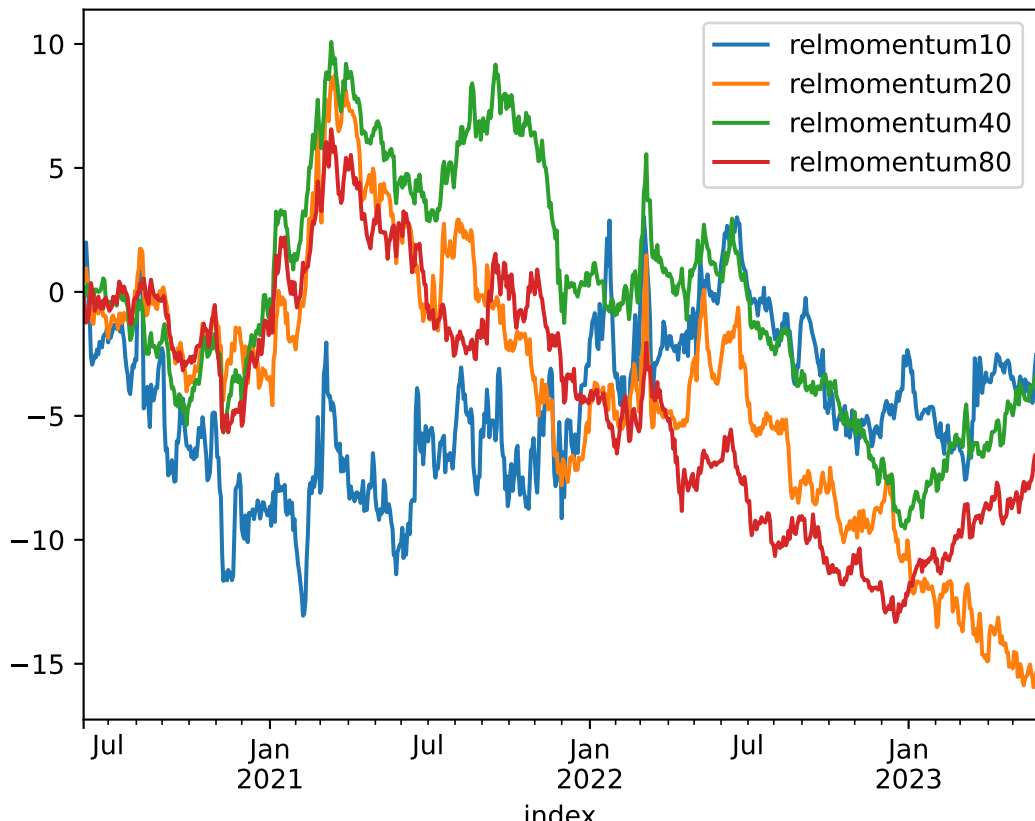


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.837, 'relmomentum20': -5.06, 'relmomentum40': -1.107, 'relmomentum80': -2.155}

ann. std {'relmomentum10': 11.972, 'relmomentum20': 8.398, 'relmomentum40': 6.991, 'relmomentum80': 6.324}

ann. SR {'relmomentum10': -0.07, 'relmomentum20': -0.6, 'relmomentum40': -0.16, 'relmomentum80': -0.34}

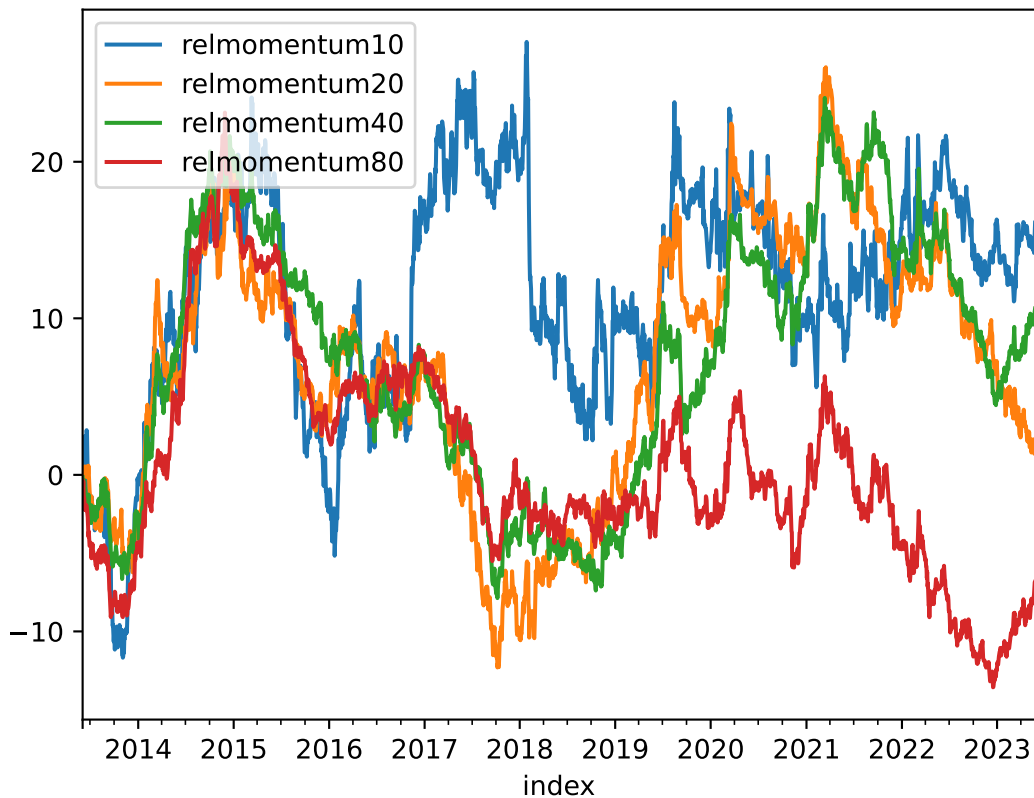


Total Trading Rule P&L for period '10Y'

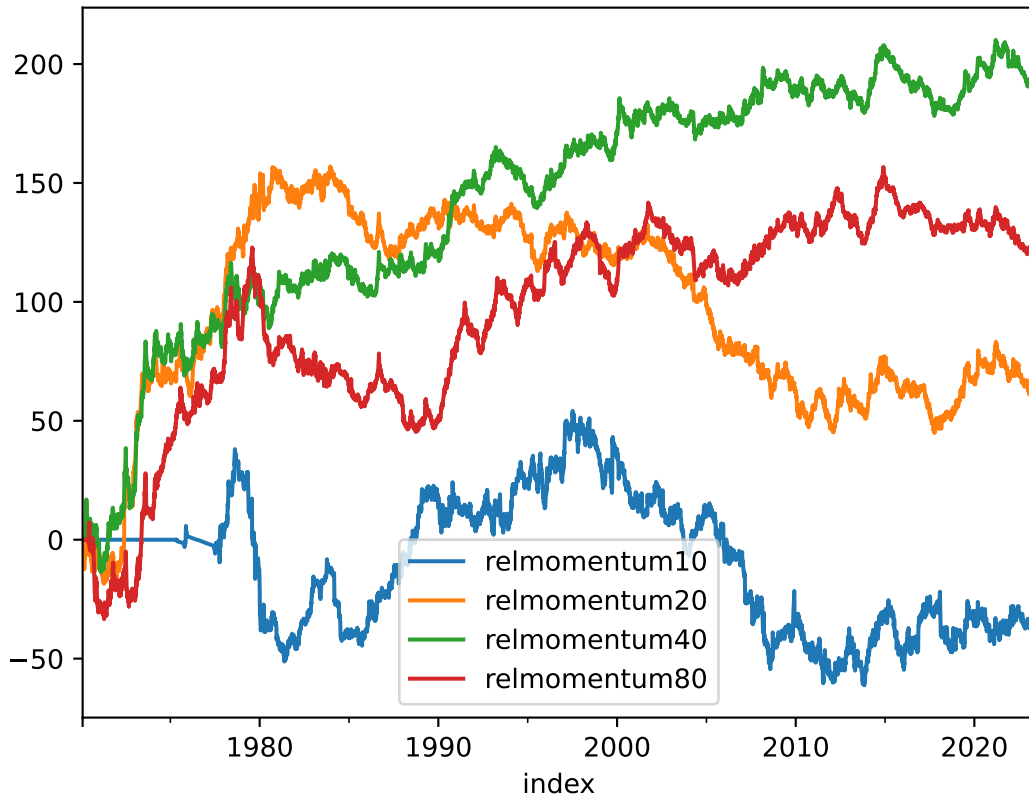
ann. mean {'relmomentum10': 1.584, 'relmomentum20': 0.189, 'relmomentum40': 1.045, 'relmomentum80': -0.669}

ann. std {'relmomentum10': 13.382, 'relmomentum20': 8.532, 'relmomentum40': 6.992, 'relmomentum80': 6.344}

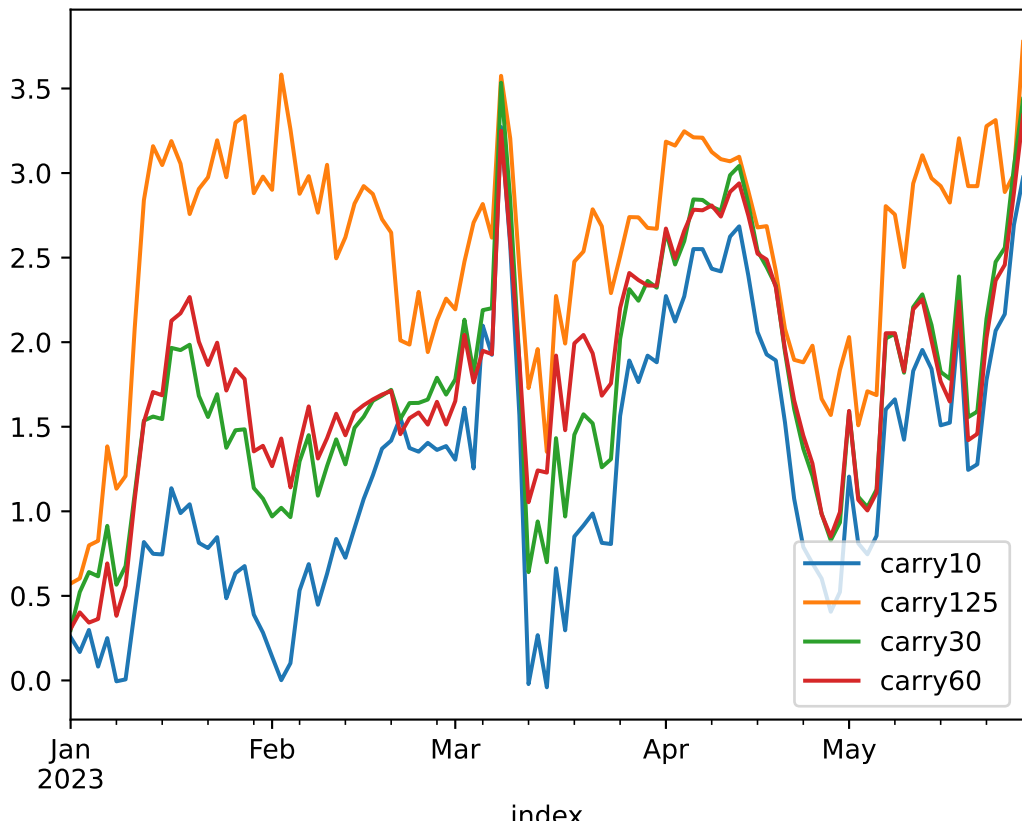
ann. SR {'relmomentum10': 0.12, 'relmomentum20': 0.02, 'relmomentum40': 0.15, 'relmomentum80': -0.11}



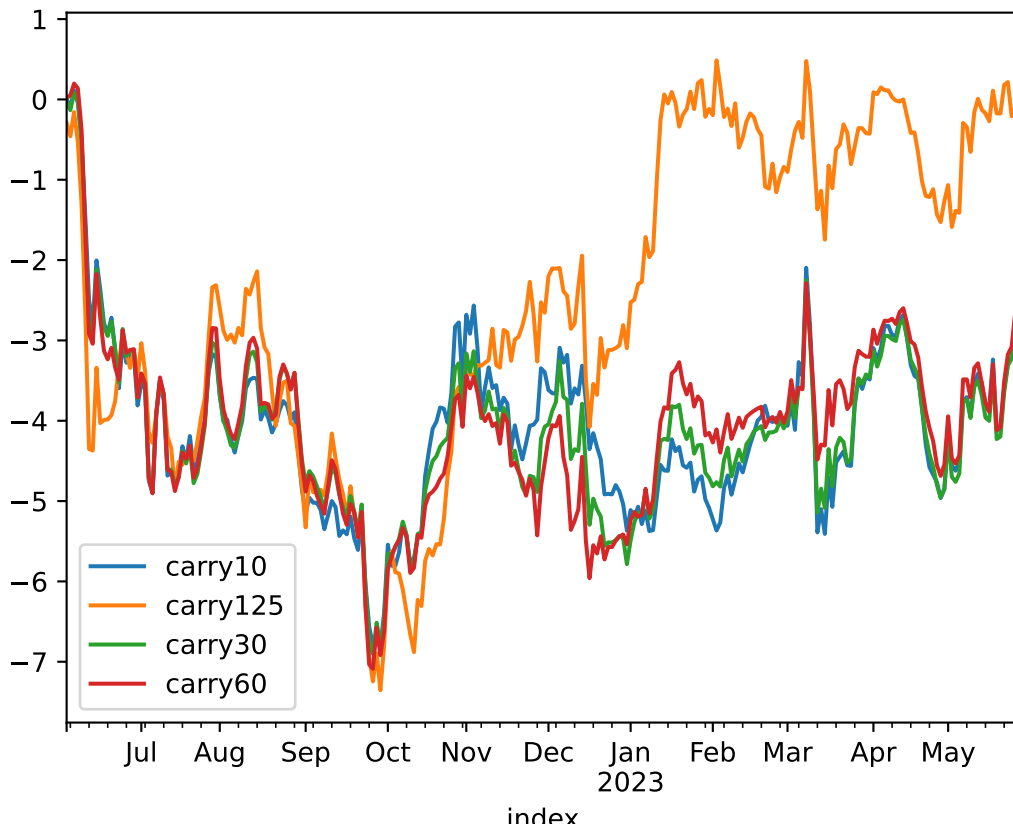
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.615, 'relmomentum20': 1.088, 'relmomentum40': 3.621, 'relmomentum80': 2.333}
ann. std {'relmomentum10': 13.381, 'relmomentum20': 10.463, 'relmomentum40': 9.633, 'relmomentum80': 9.777}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 7.25, 'carry125': 9.205, 'carry30': 8.384, 'carry60': 8.147}
ann. std {'carry10': 6.011, 'carry125': 5.609, 'carry30': 5.684, 'carry60': 5.272}
ann. SR {'carry10': 1.21, 'carry125': 1.64, 'carry30': 1.47, 'carry60': 1.55}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.394, 'carry125': 0.679, 'carry30': -2.347, 'carry60': -2.196}
ann. std {'carry10': 5.976, 'carry125': 6.38, 'carry30': 5.947, 'carry60': 5.892}
ann. SR {'carry10': -0.4, 'carry125': 0.11, 'carry30': -0.39, 'carry60': -0.37}

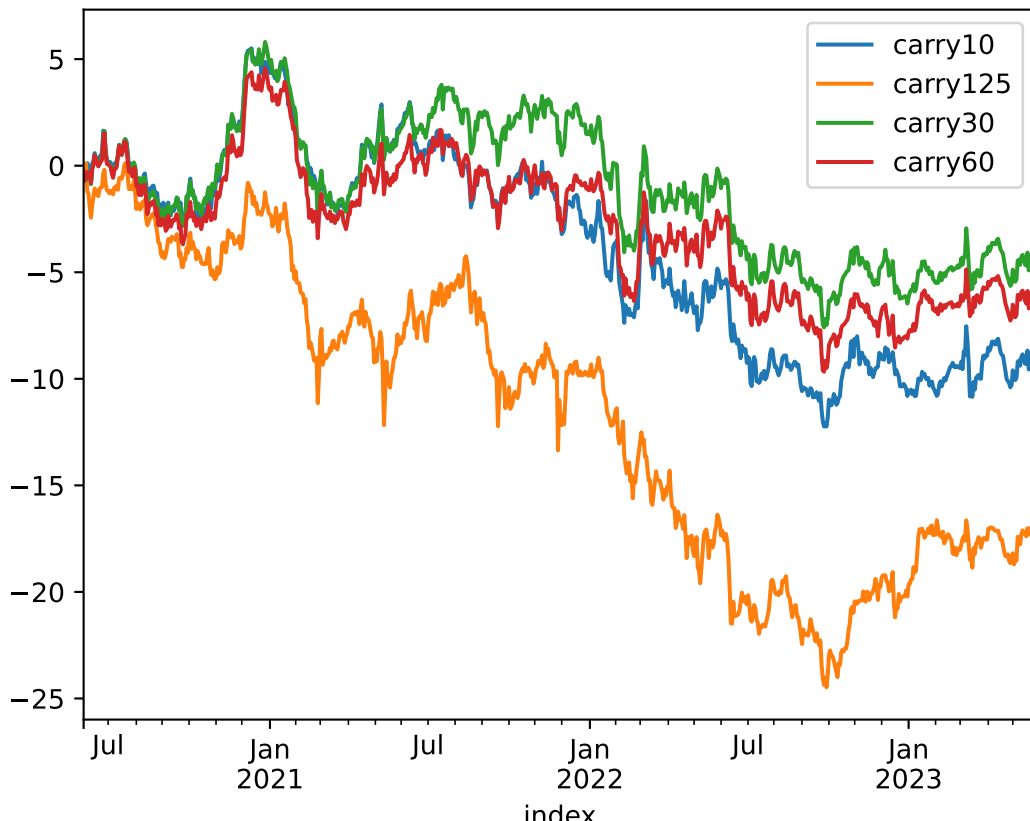


Total Trading Rule P&L for period '3Y'

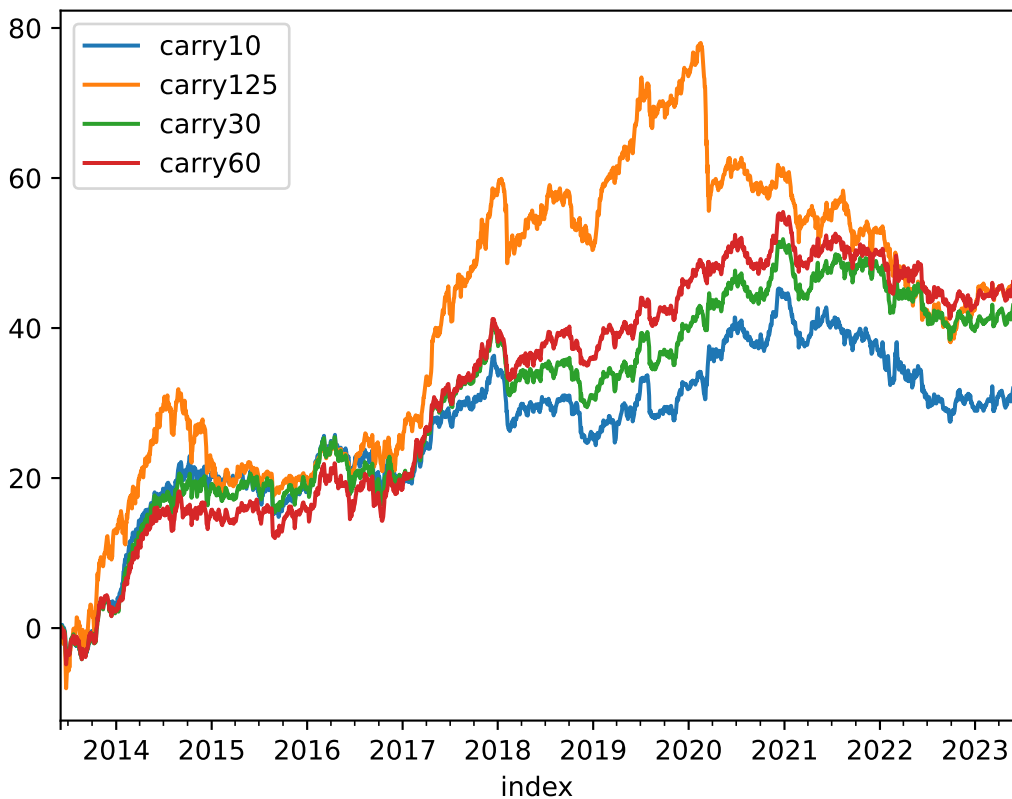
ann. mean {'carry10': -2.577, 'carry125': -5.41, 'carry30': -0.997, 'carry60': -1.571}

ann. std {'carry10': 6.563, 'carry125': 8.037, 'carry30': 6.5, 'carry60': 6.499}

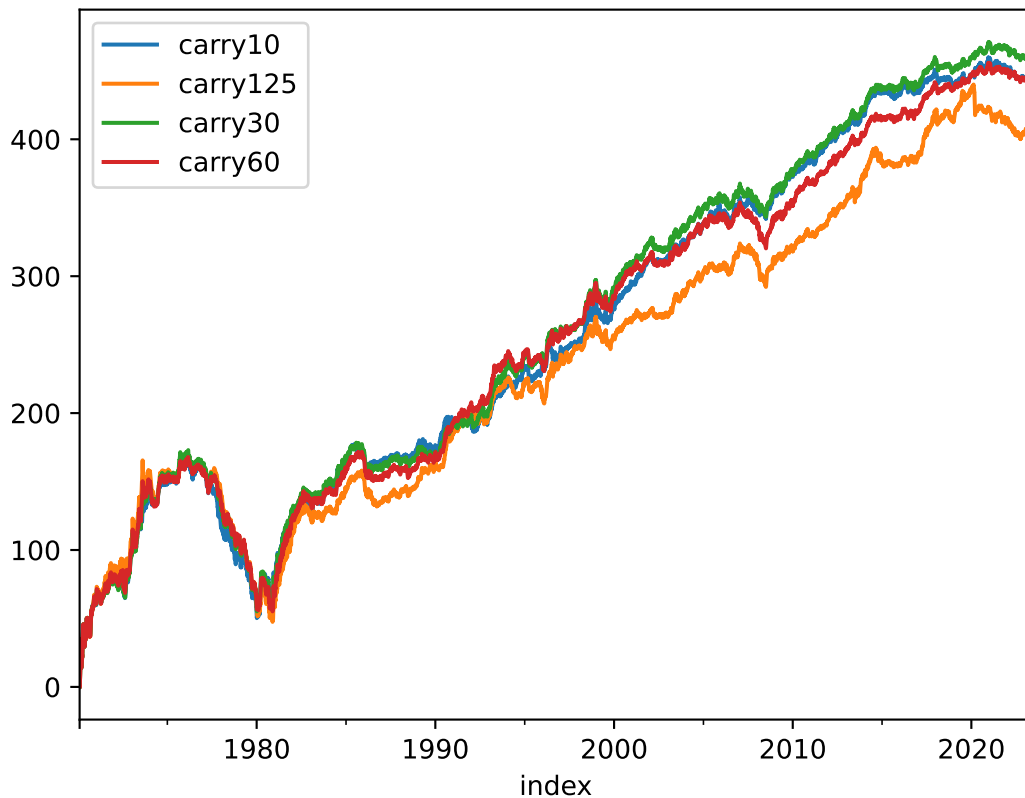
ann. SR {'carry10': -0.39, 'carry125': -0.67, 'carry30': -0.15, 'carry60': -0.24}



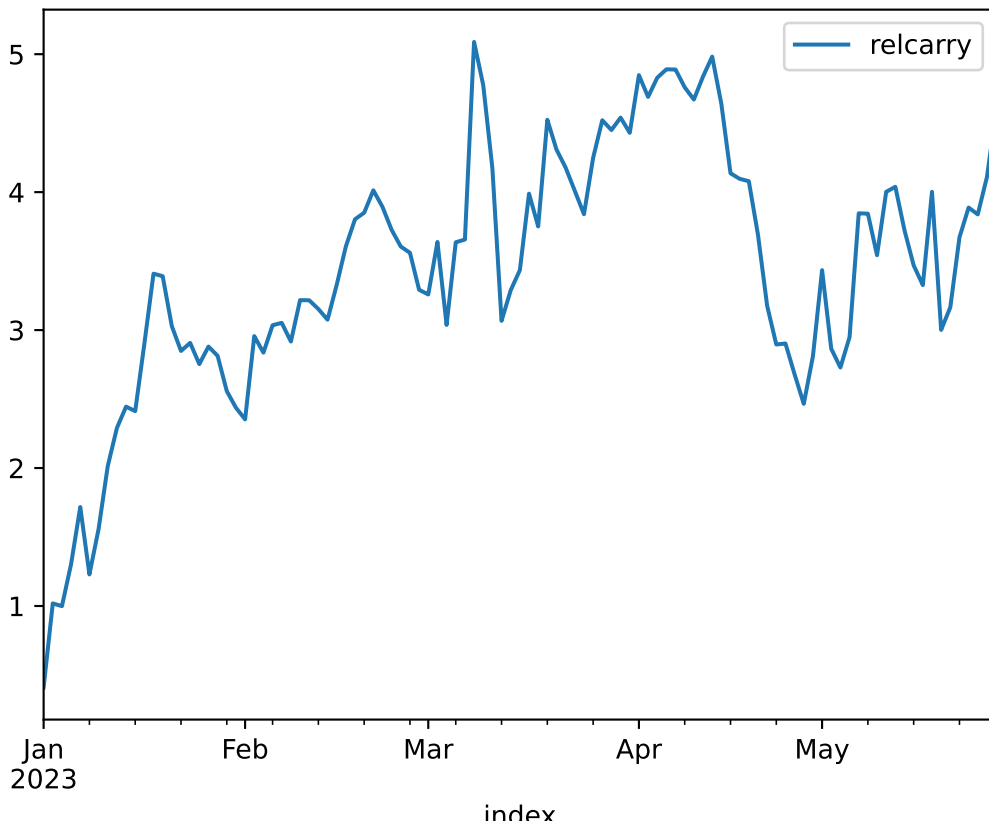
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.139, 'carry125': 4.534, 'carry30': 4.228, 'carry60': 4.533}
ann. std {'carry10': 6.378, 'carry125': 8.939, 'carry30': 6.463, 'carry60': 6.406}
ann. SR {'carry10': 0.49, 'carry125': 0.51, 'carry30': 0.65, 'carry60': 0.71}



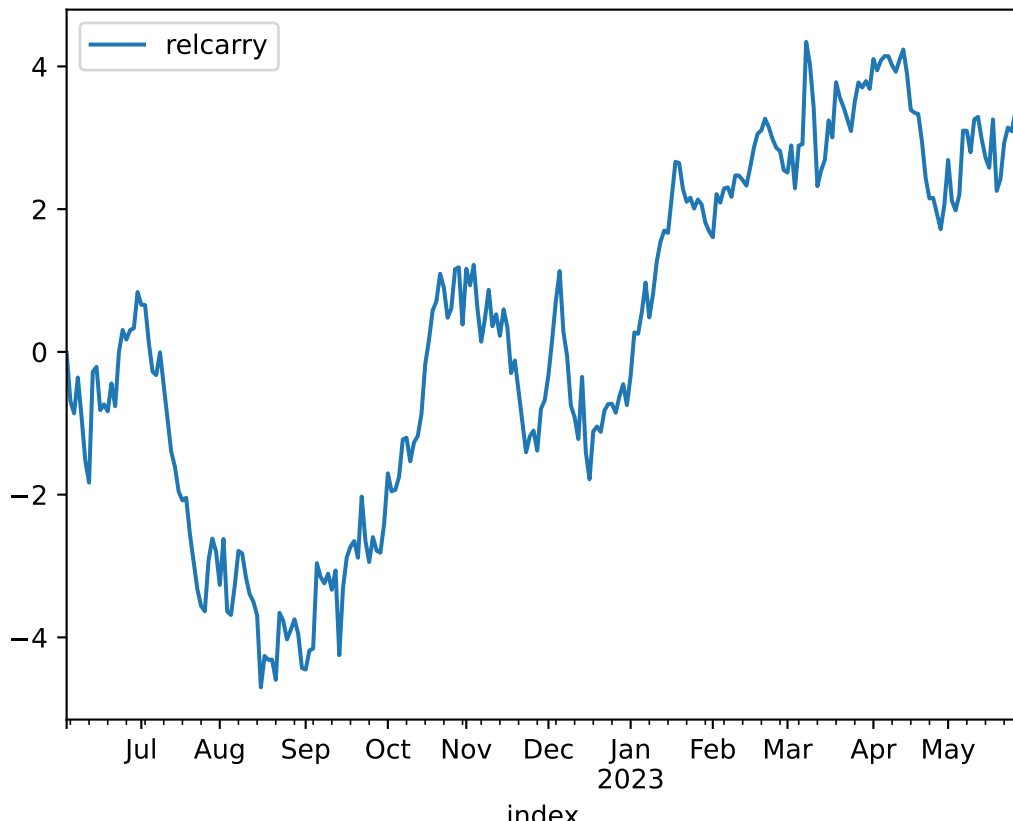
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.218, 'carry125': 7.512, 'carry30': 8.509, 'carry60': 8.22}
ann. std {'carry10': 11.195, 'carry125': 11.551, 'carry30': 11.252, 'carry60': 11.255}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



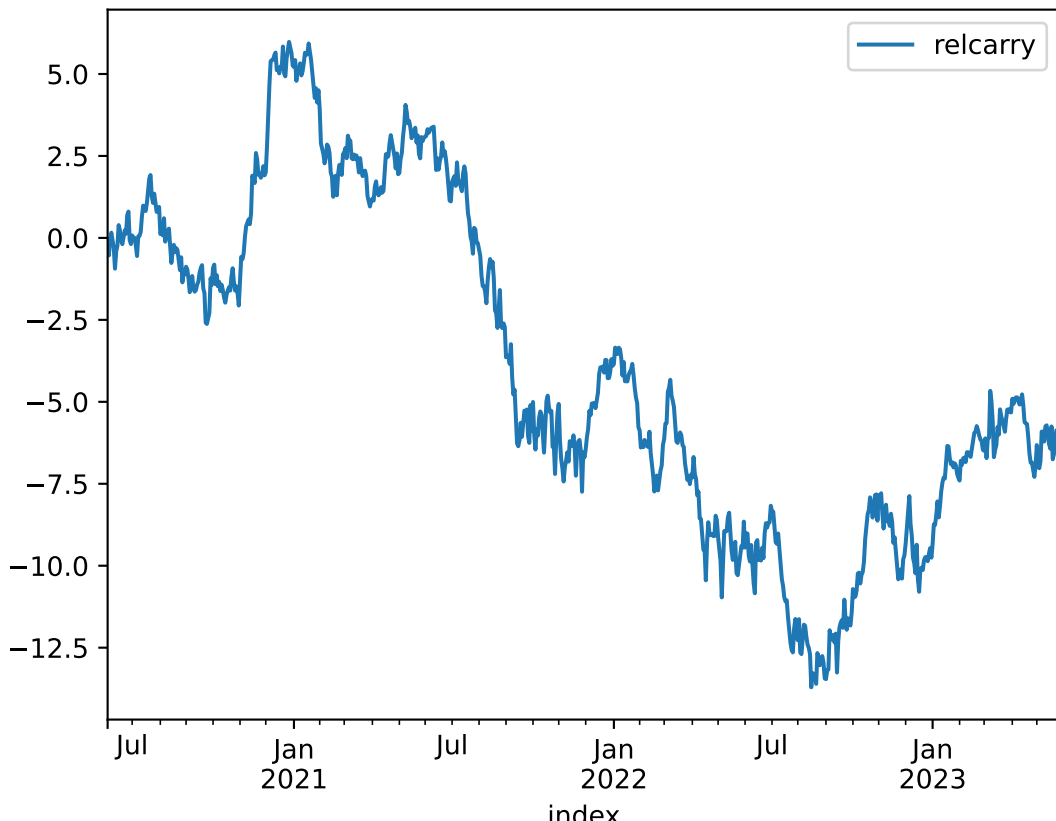
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 11.186}
ann. std {'relcarry': 5.975}
ann. SR {'relcarry': 1.87}



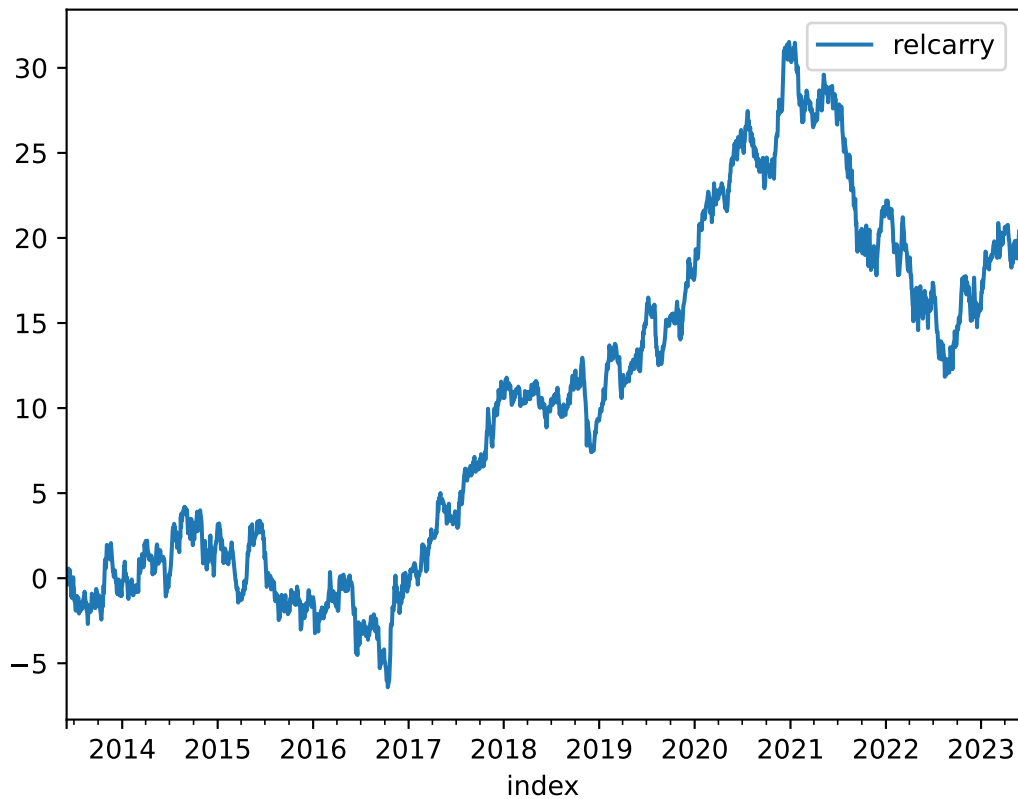
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 3.842}
ann. std {'relcarry': 6.757}
ann. SR {'relcarry': 0.57}



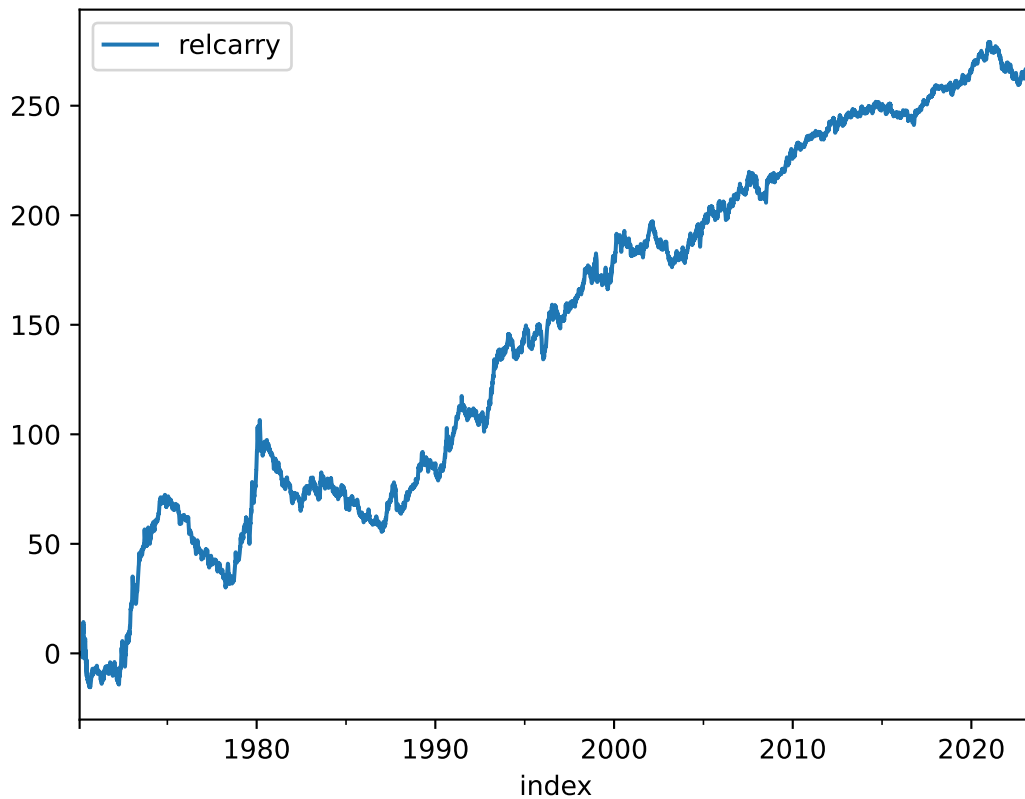
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.7}
ann. std {'relcarry': 6.73}
ann. SR {'relcarry': -0.25}



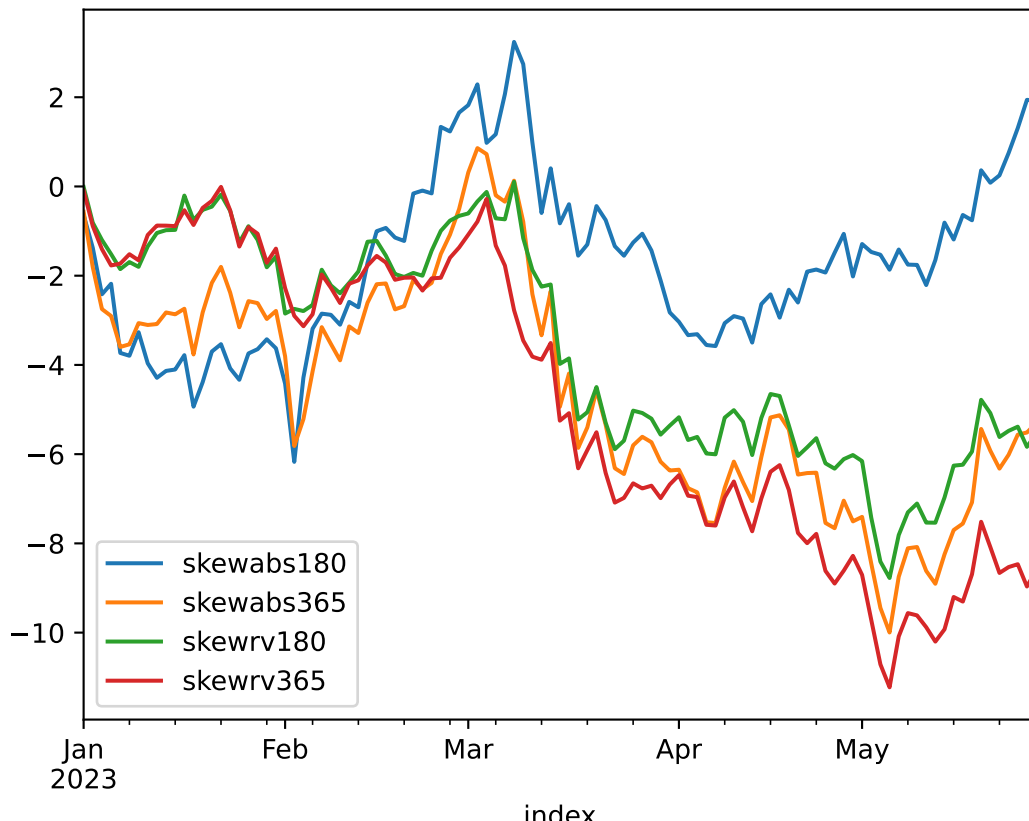
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.003}
ann. std {'relcarry': 5.83}
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.932}
ann. std {'relcarry': 8.957}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 4.681, 'skewabs365': -12.936, 'skewrv180': -13.53, 'skewrv365': -20.982}
ann. std {'skewabs180': 10.879, 'skewabs365': 11.591, 'skewrv180': 8.442, 'skewrv365': 8.416}
ann. SR {'skewabs180': 0.43, 'skewabs365': -1.12, 'skewrv180': -1.6, 'skewrv365': -2.49}

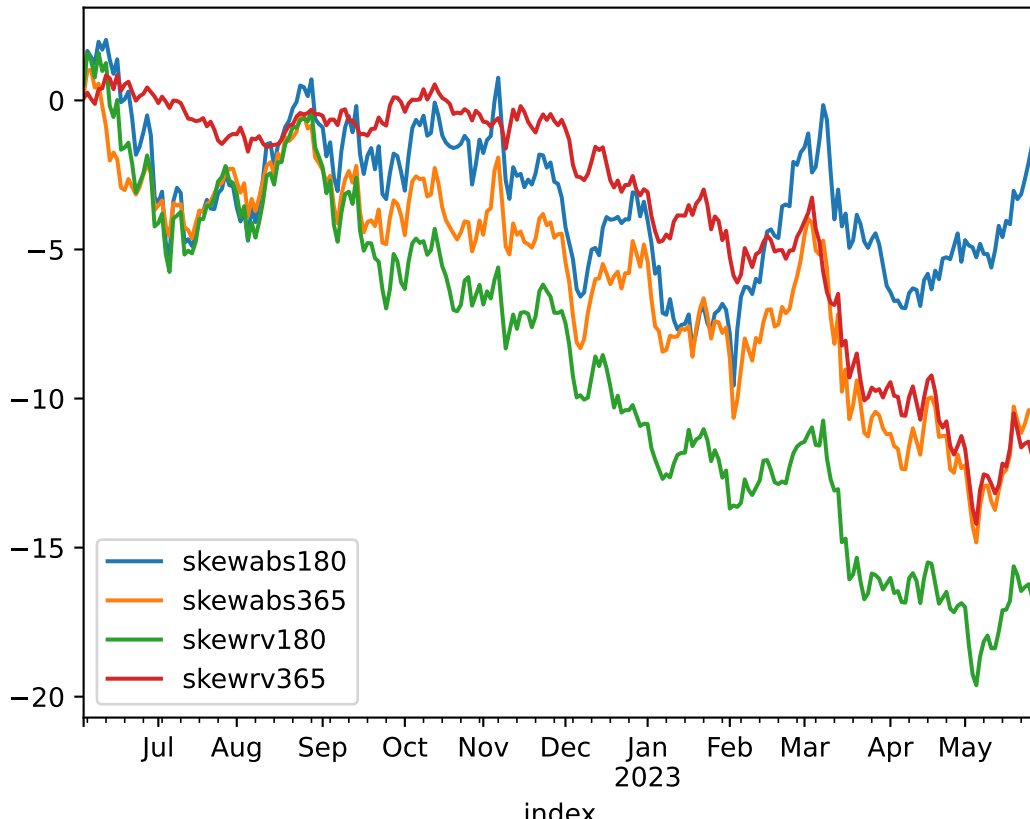


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -1.476, 'skewabs365': -10.137, 'skewrv180': -16.392, 'skewrv365': -11.584}

ann. std {'skewabs180': 11.176, 'skewabs365': 10.226, 'skewrv180': 9.544, 'skewrv365': 6.348}

ann. SR {'skewabs180': -0.13, 'skewabs365': -0.99, 'skewrv180': -1.72, 'skewrv365': -1.82}

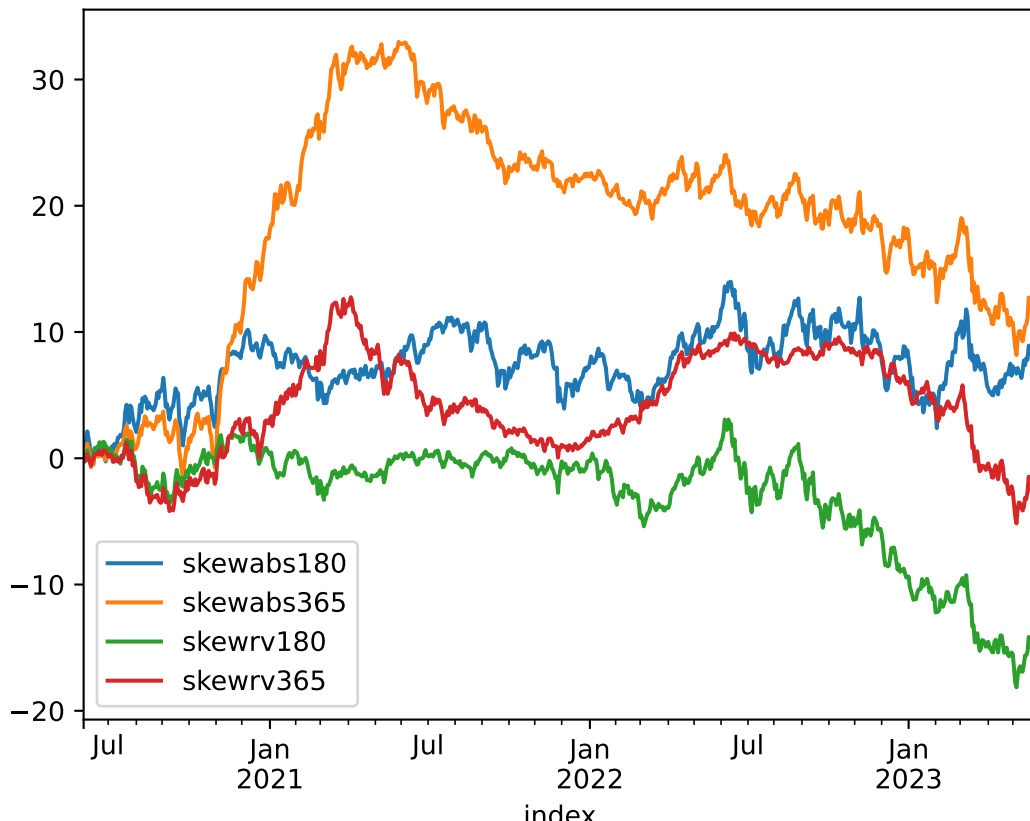


Total Trading Rule P&L for period '3Y'

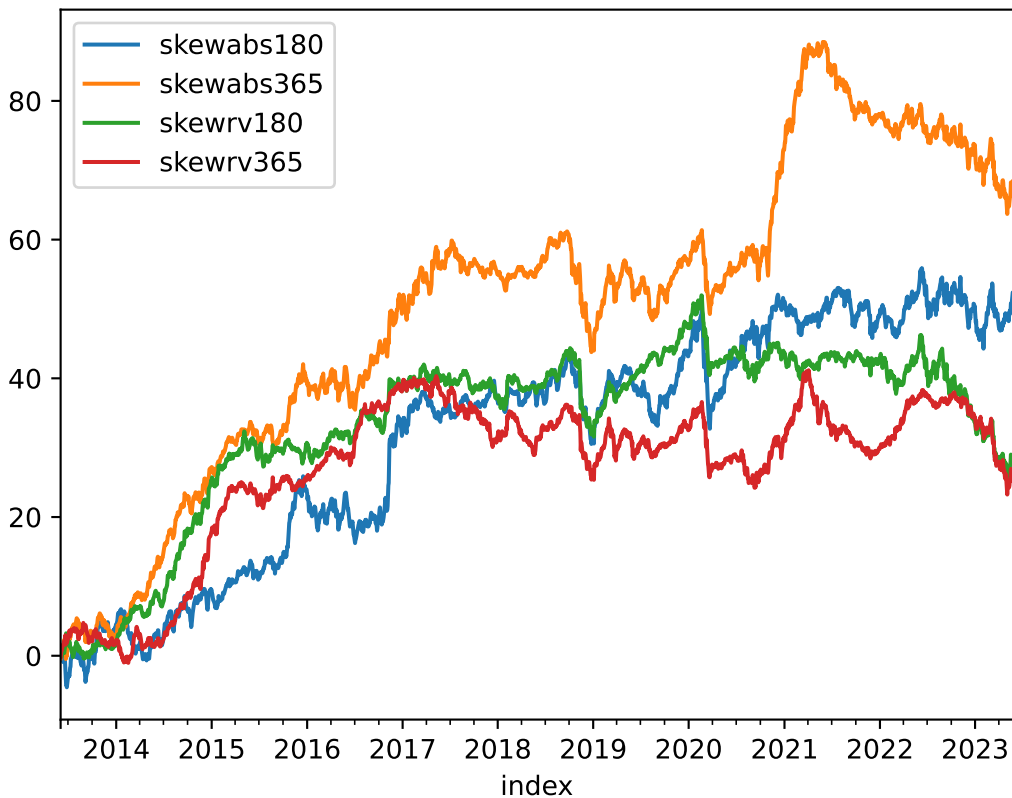
ann. mean {'skewabs180': 3.449, 'skewabs365': 4.232, 'skewrv180': -4.907, 'skewrv365': -0.837}

ann. std {'skewabs180': 9.181, 'skewabs365': 9.076, 'skewrv180': 7.404, 'skewrv365': 6.543}

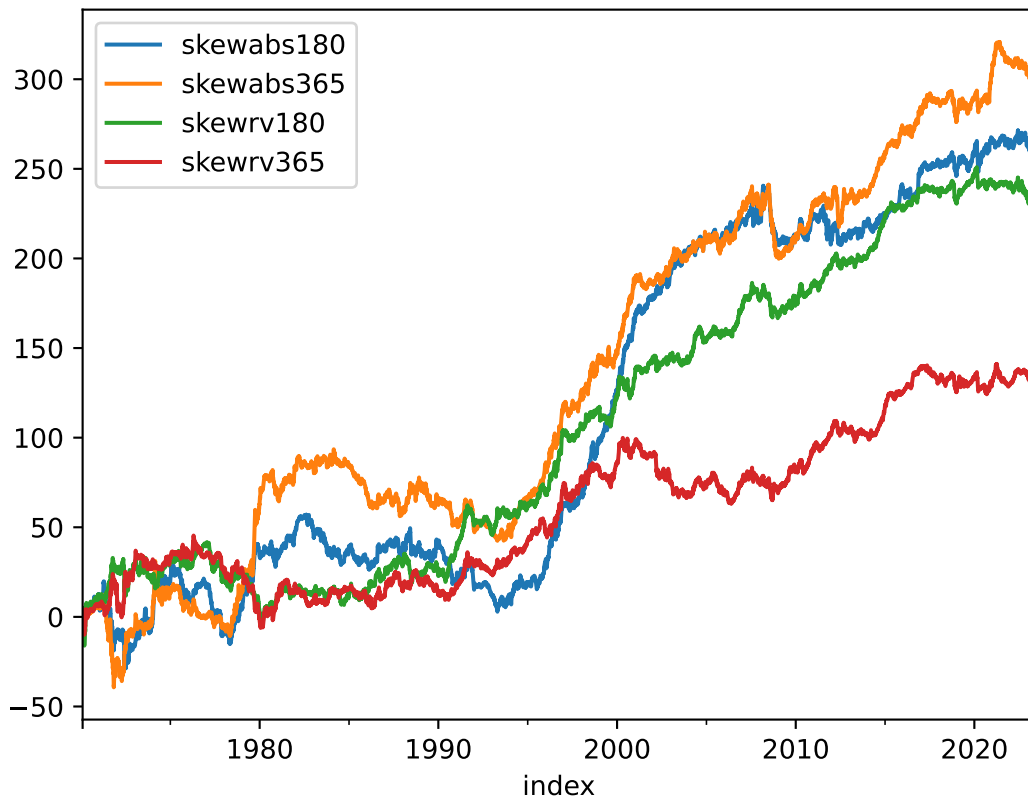
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.47, 'skewrv180': -0.66, 'skewrv365': -0.13}



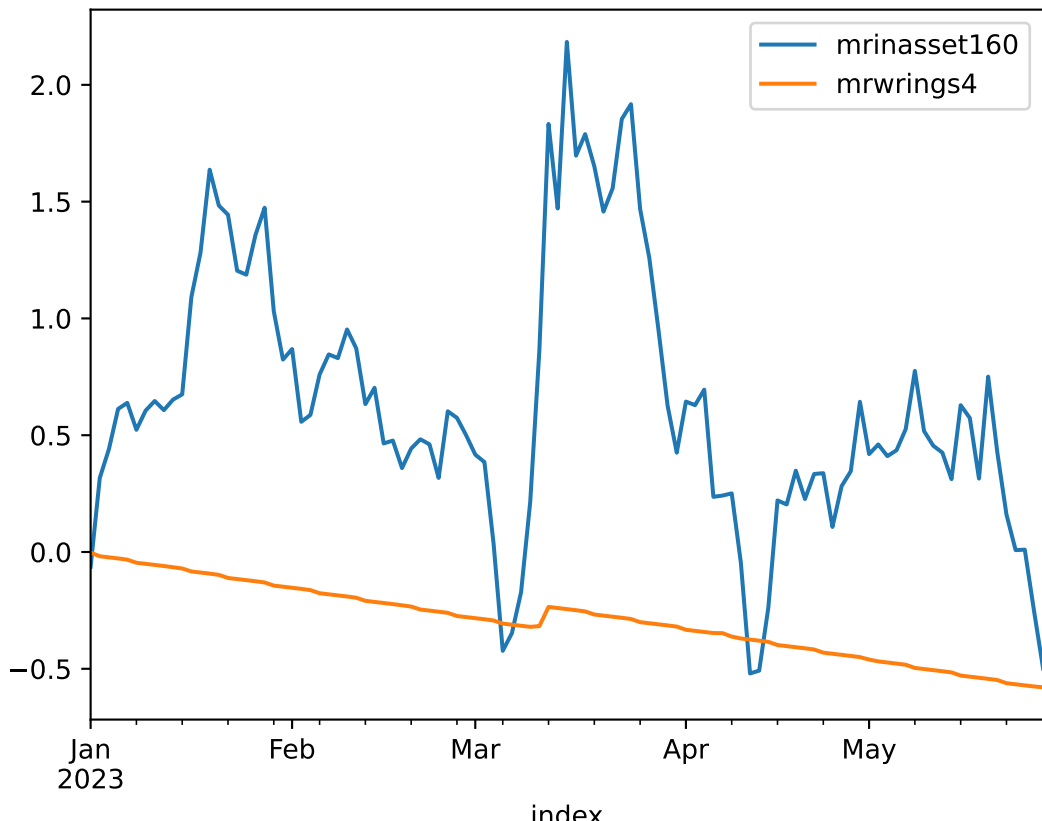
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.146, 'skewabs365': 6.721, 'skewrv180': 2.775, 'skewrv365': 2.542}
ann. std {'skewabs180': 8.041, 'skewabs365': 7.989, 'skewrv180': 6.438, 'skewrv365': 6.099}
ann. SR {'skewabs180': 0.64, 'skewabs365': 0.84, 'skewrv180': 0.43, 'skewrv365': 0.42}



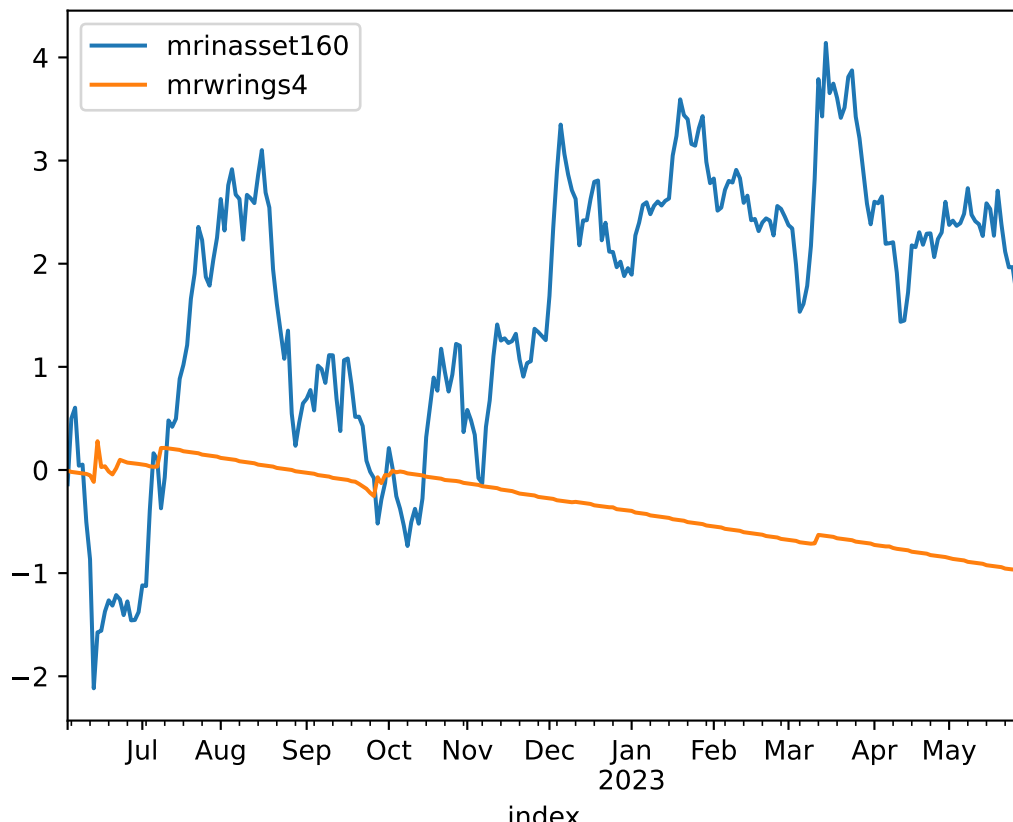
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.932, 'skewabs365': 5.535, 'skewrv180': 4.182, 'skewrv365': 2.317}
ann. std {'skewabs180': 10.098, 'skewabs365': 9.871, 'skewrv180': 8.752, 'skewrv365': 8.127}
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



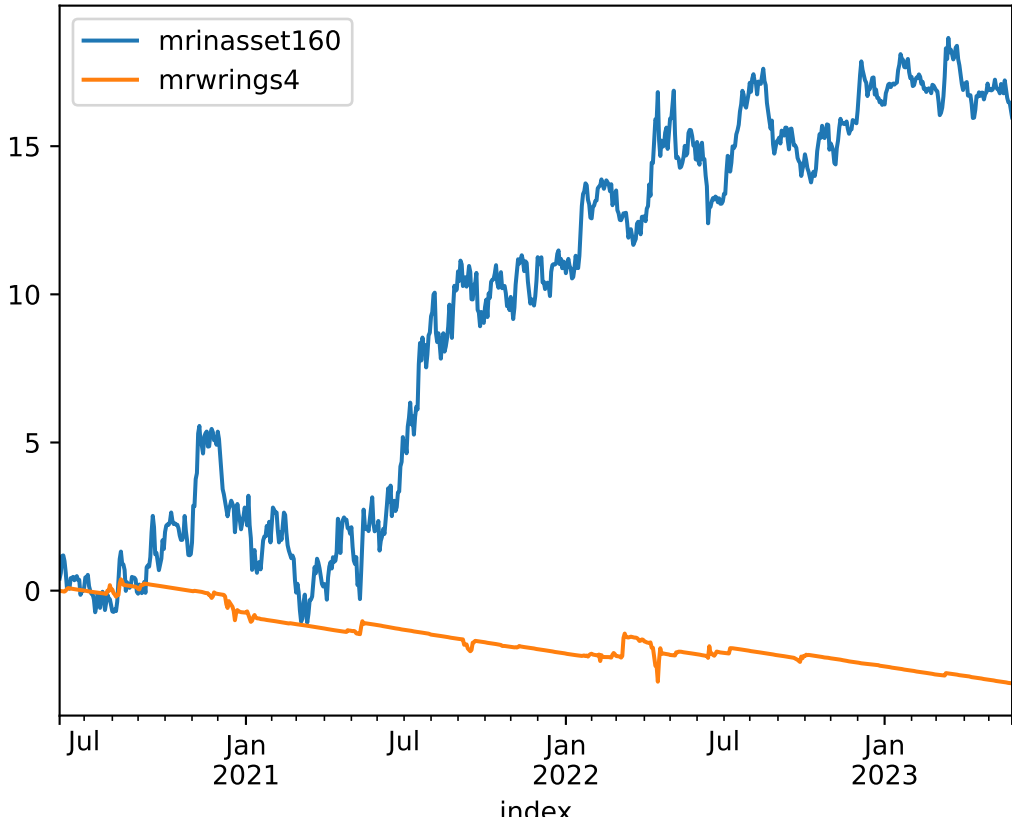
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -1.217, 'mrwrings4': -1.412}
ann. std {'mrinasset160': 4.069, 'mrwrings4': 0.15}
ann. SR {'mrinasset160': -0.3, 'mrwrings4': -9.43}



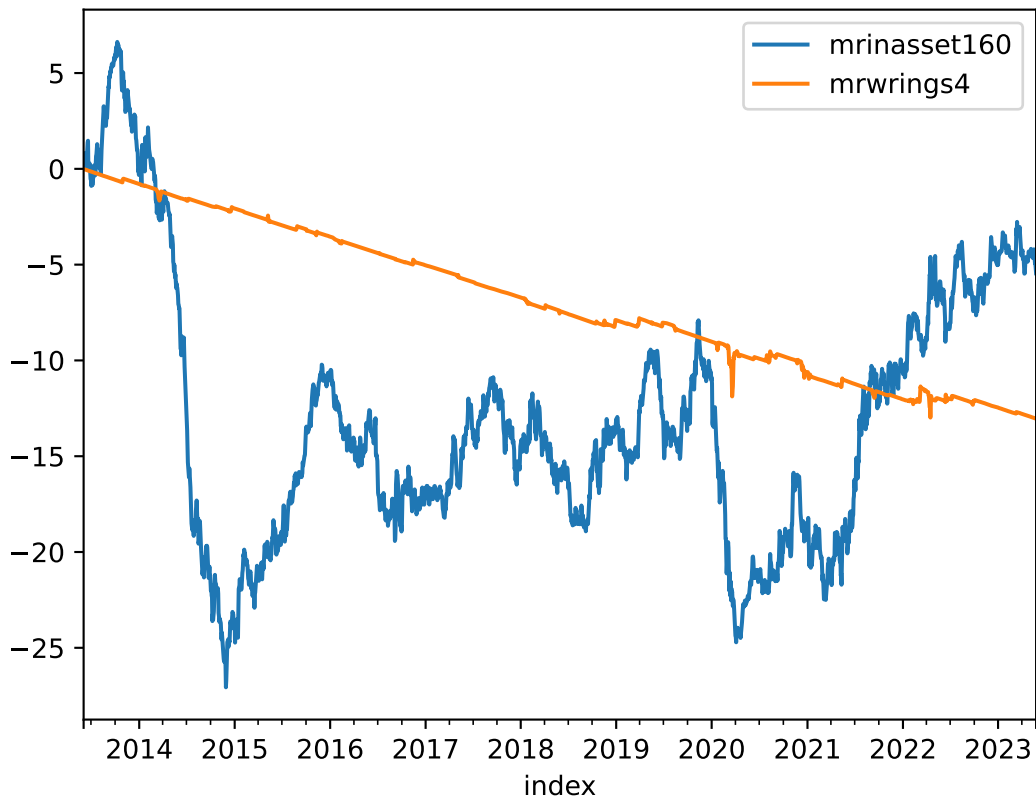
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 1.458, 'mrwrings4': -0.973}
ann. std {'mrinasset160': 4.704, 'mrwrings4': 0.579}
ann. SR {'mrinasset160': 0.31, 'mrwrings4': -1.68}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.255, 'mrwrings4': -1.029}
ann. std {'mrinasset160': 6.283, 'mrwrings4': 1.02}
ann. SR {'mrinasset160': 0.84, 'mrwrings4': -1.01}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.536, 'mrwrings4': -1.281}
ann. std {'mrinasset160': 6.174, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.09, 'mrwrings4': -1.46}



Total Trading Rule P&L for period '99Y'
ann. mean {'mriasset160': -3.585, 'mrwrings4': -2.19}
ann. std {'mriasset160': 9.861, 'mrwrings4': 2.086}
ann. SR {'mriasset160': -0.36, 'mrwrings4': -1.05}

