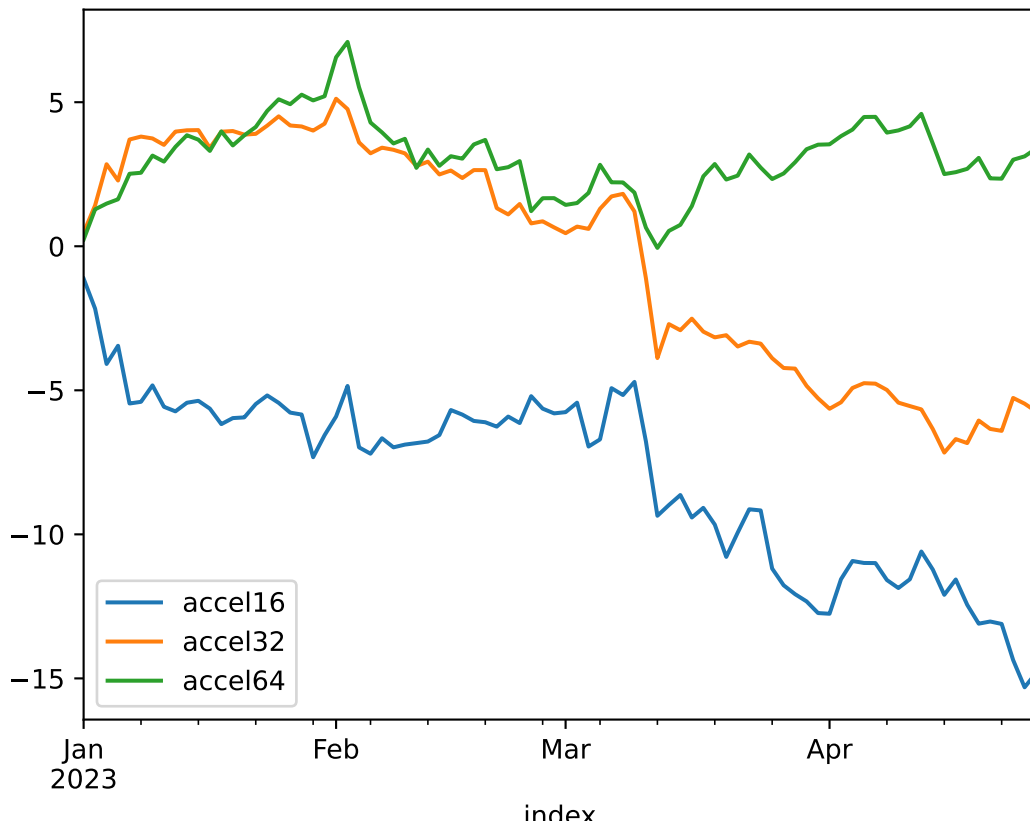
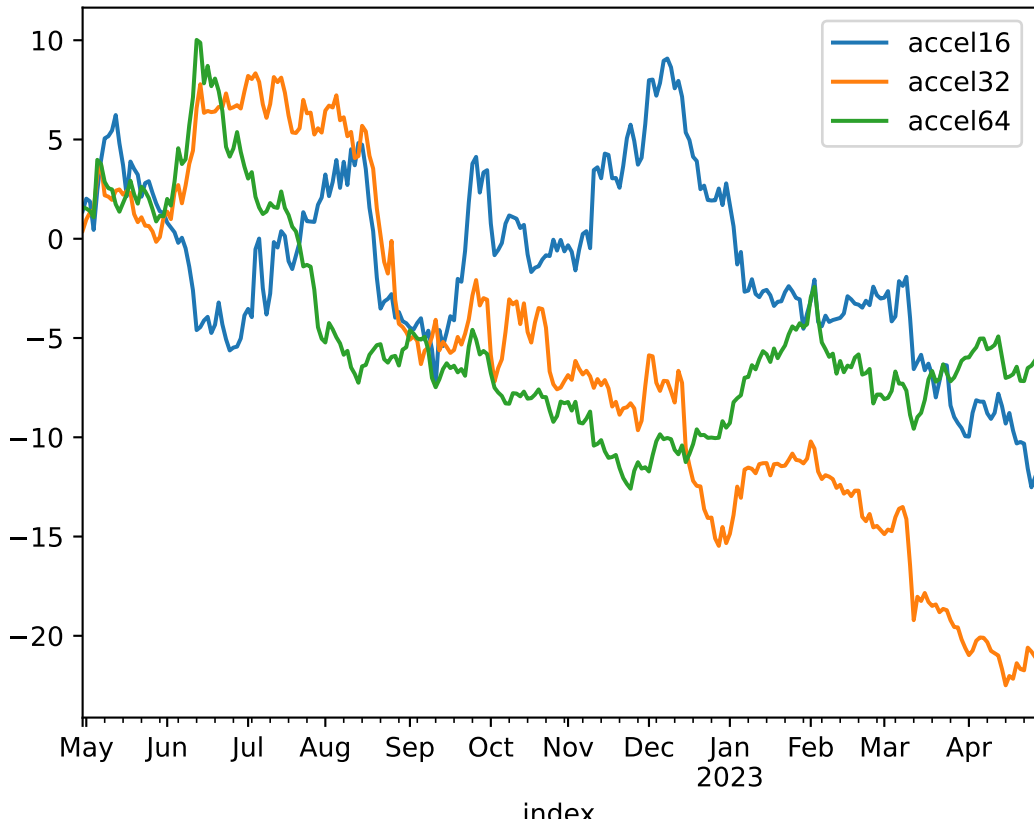


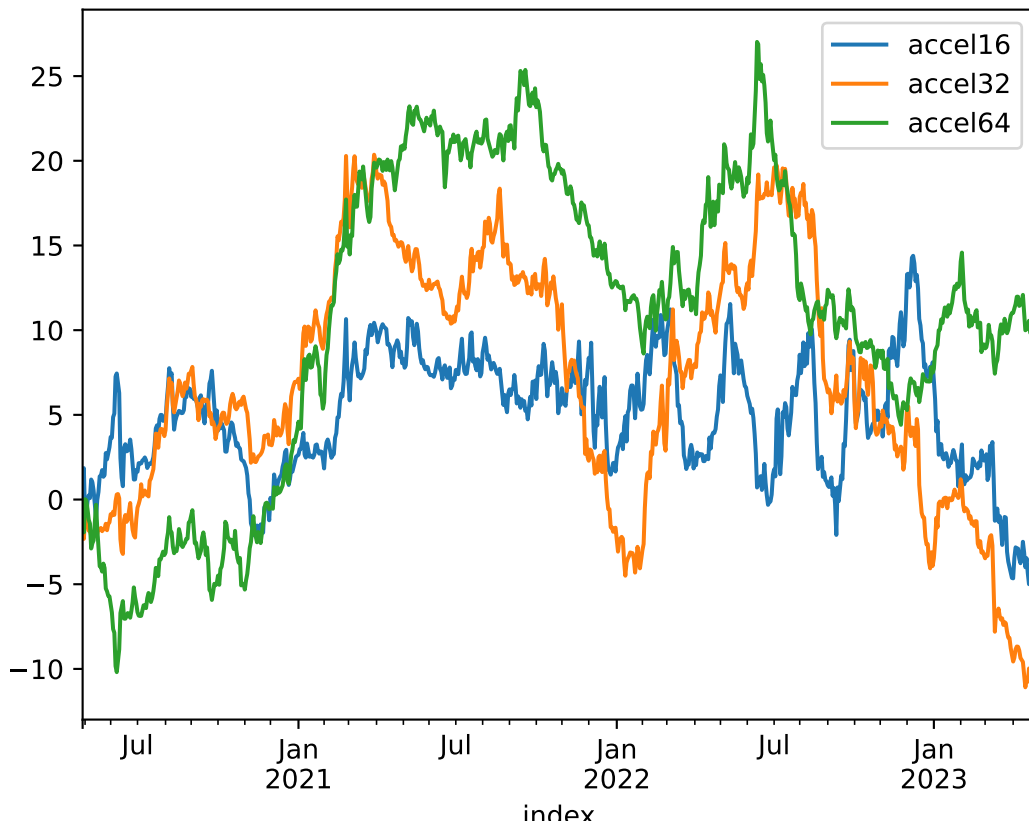
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -45.13, 'accel32': -17.471, 'accel64': 10.327}
ann. std {'accel16': 13.073, 'accel32': 10.131, 'accel64': 9.422}
ann. SR {'accel16': -3.45, 'accel32': -1.72, 'accel64': 1.1}



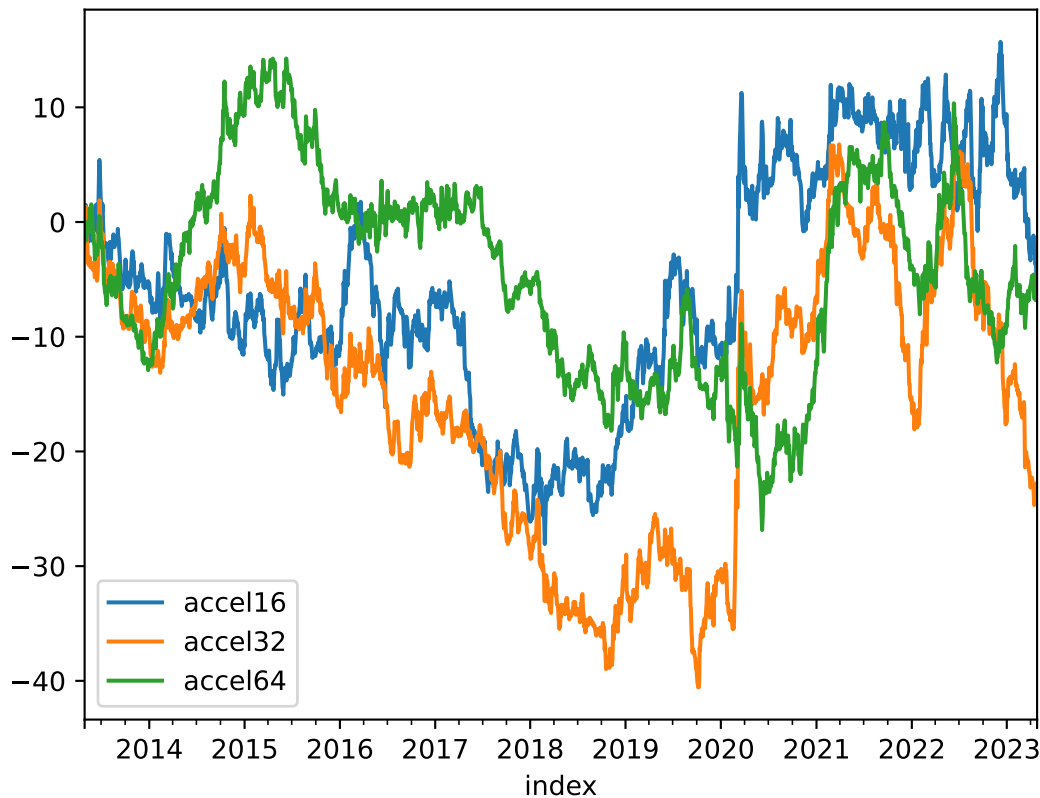
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -11.833, 'accel32': -20.74, 'accel64': -6.032}
ann. std {'accel16': 16.121, 'accel32': 13.035, 'accel64': 10.779}
ann. SR {'accel16': -0.73, 'accel32': -1.59, 'accel64': -0.56}



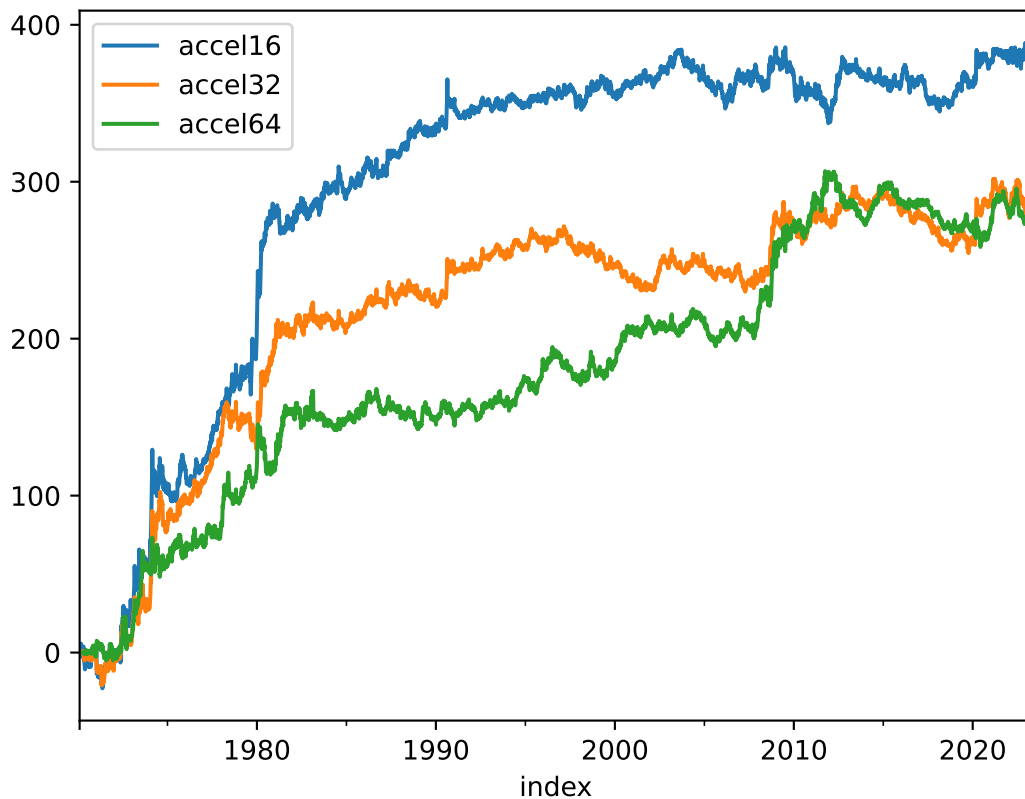
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.195, 'accel32': -3.161, 'accel64': 3.56}
ann. std {'accel16': 13.678, 'accel32': 11.784, 'accel64': 10.623}
ann. SR {'accel16': -0.16, 'accel32': -0.27, 'accel64': 0.34}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.529, 'accel32': -2.281, 'accel64': -0.568}
ann. std {'accel16': 11.718, 'accel32': 10.691, 'accel64': 9.331}
ann. SR {'accel16': -0.05, 'accel32': -0.21, 'accel64': -0.06}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.772, 'accel32': 5.011, 'accel64': 5.152}
ann. std {'accel16': 14.13, 'accel32': 12.454, 'accel64': 12.103}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

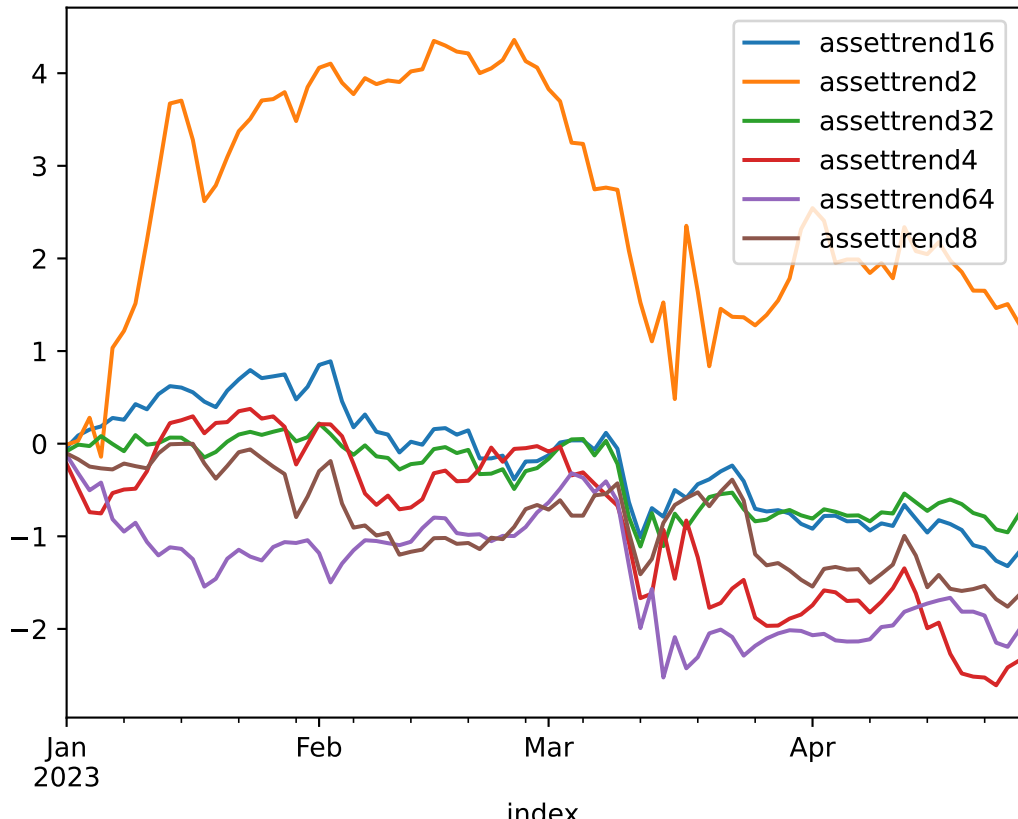


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -3.568, 'assettrend2': 3.946, 'assettrend32': -2.312, 'assettrend4': -7.136, 'assettrend64': -6.132, 'assettrend8': -4.983}

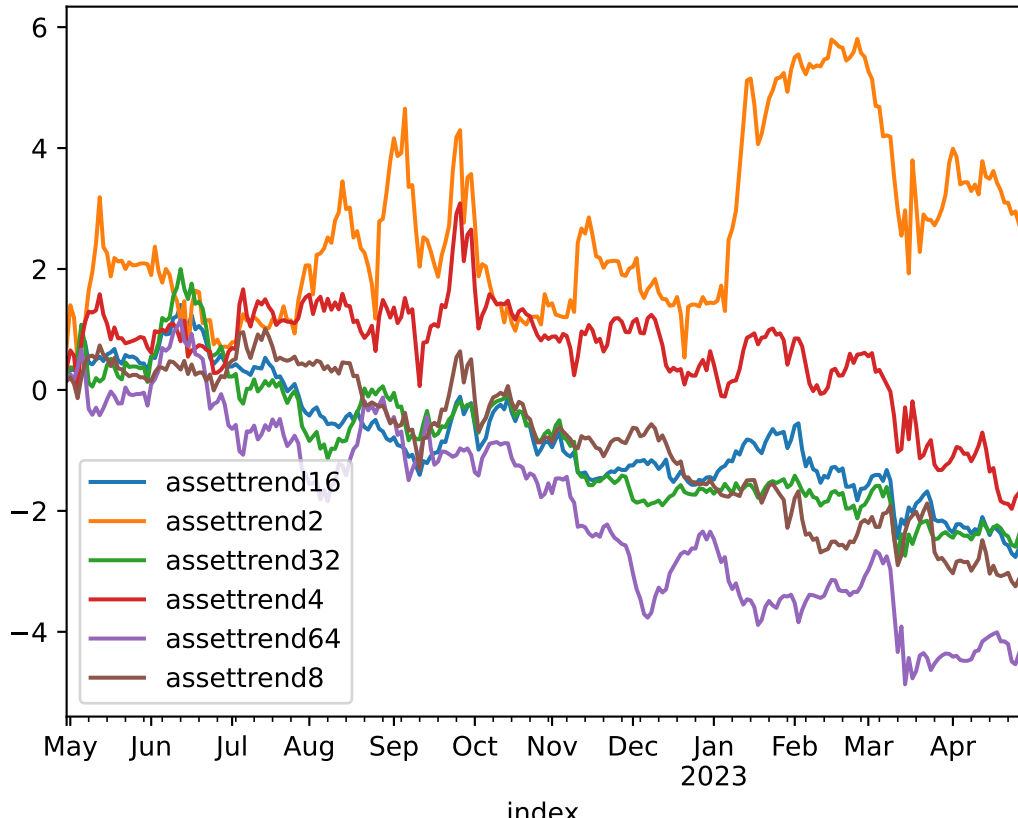
ann. std {'assettrend16': 2.537, 'assettrend2': 6.534, 'assettrend32': 2.296, 'assettrend4': 3.608, 'assettrend64': 3.345, 'assettrend8': 2.879}

ann. SR {'assettrend16': -1.41, 'assettrend2': 0.6, 'assettrend32': -1.01, 'assettrend4': -1.98, 'assettrend64': -1.83, 'assettrend8': -1.73}



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

ann. mean {'assettrend16': -2.571, 'assettrend2': 2.698, 'assettrend32': -2.357, 'assettrend4': -1.674, 'assettrend64': -4.289, 'assettrend8': -3.076}
ann. std {'assettrend16': 2.301, 'assettrend2': 6.347, 'assettrend32': 2.62, 'assettrend4': 3.99, 'assettrend64': 3.15, 'assettrend8': 2.662}
ann. SR {'assettrend16': -1.12, 'assettrend2': 0.43, 'assettrend32': -0.9, 'assettrend4': -0.42, 'assettrend64': -1.36, 'assettrend8': -1.16}

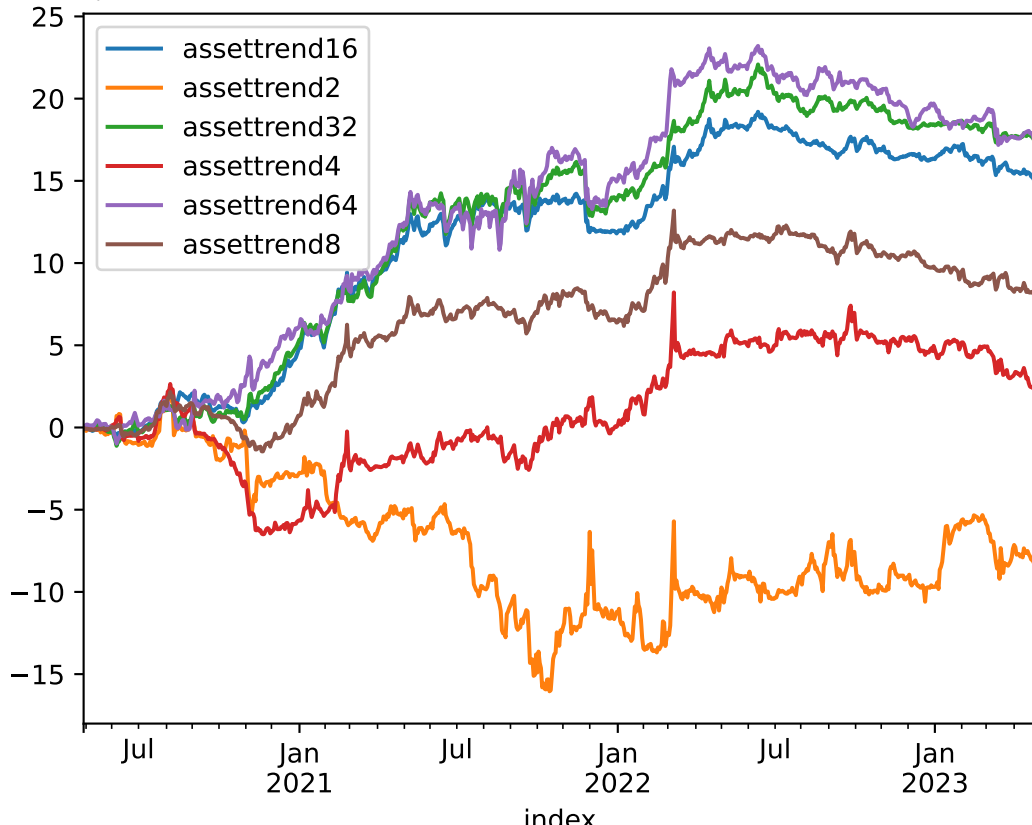


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.971, 'assettrend2': -2.747, 'assettrend32': 5.79, 'assettrend4': 0.859, 'assettrend64': 5.792, 'assettrend8': 2.67}

ann. std {'assettrend16': 3.407, 'assettrend2': 7.798, 'assettrend32': 4.121, 'assettrend4': 4.944, 'assettrend64': 4.997, 'assettrend8': 3.517}

ann. SR {'assettrend16': 1.46, 'assettrend2': -0.35, 'assettrend32': 1.41, 'assettrend4': 0.17, 'assettrend64': 1.16, 'assettrend8': 0.76}

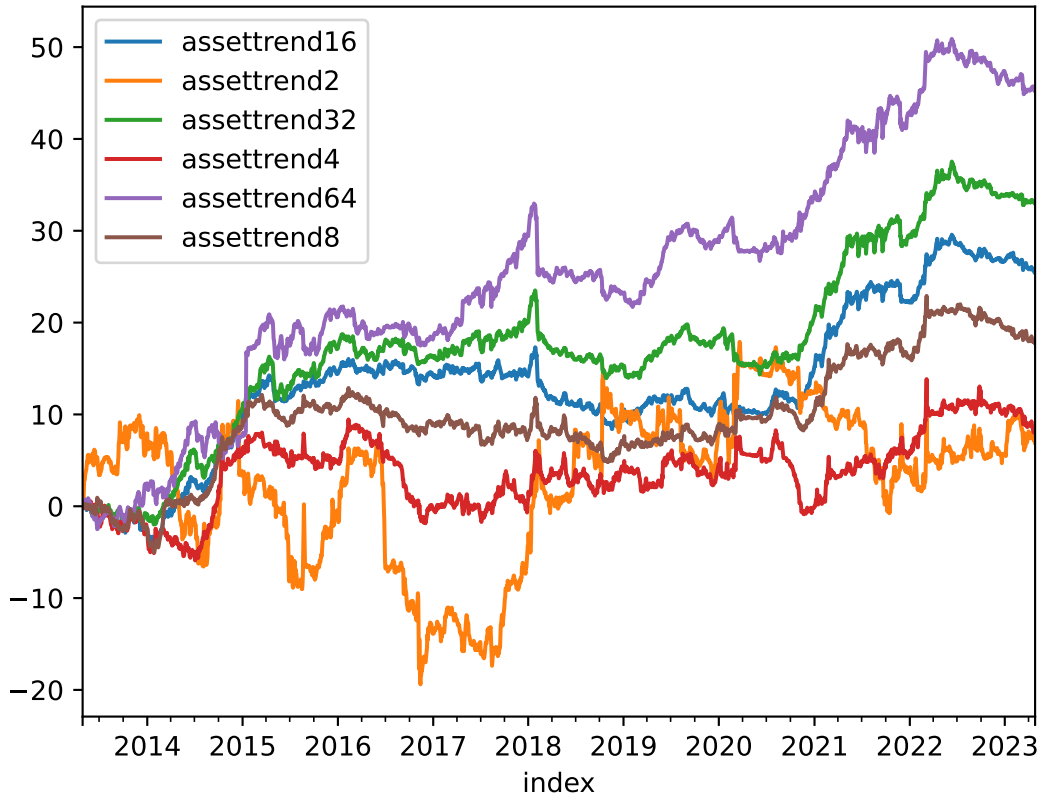


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.508, 'assettrend2': 0.677, 'assettrend32': 3.252, 'assettrend4': 0.81, 'assettrend64': 4.453, 'assettrend8': 1.753}

ann. std {'assettrend16': 3.151, 'assettrend2': 9.781, 'assettrend32': 3.588, 'assettrend4': 4.967, 'assettrend64': 5.189, 'assettrend8': 3.45}

ann. SR {'assettrend16': 0.8, 'assettrend2': 0.07, 'assettrend32': 0.91, 'assettrend4': 0.16, 'assettrend64': 0.86, 'assettrend8': 0.51}

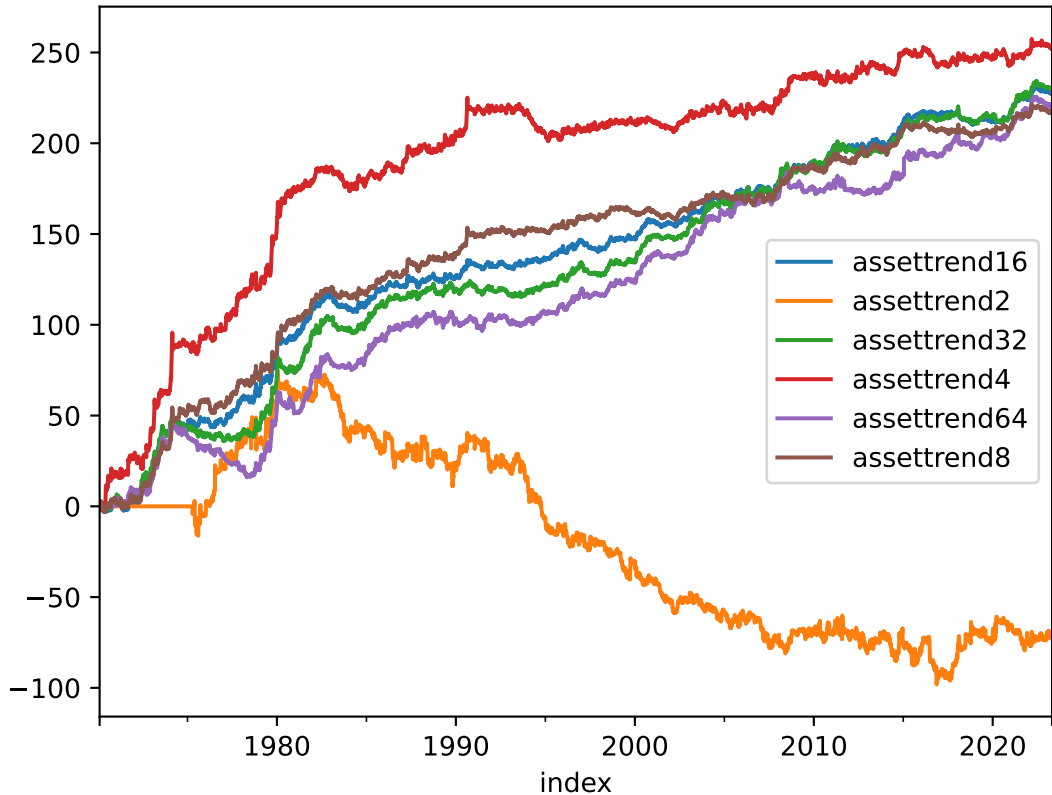


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.189, 'assettrend2': -1.323, 'assettrend32': 4.24, 'assettrend4': 4.643, 'assettrend64': 4.057, 'assettrend8': 3.989}

ann. std {'assettrend16': 4.303, 'assettrend2': 10.258, '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}

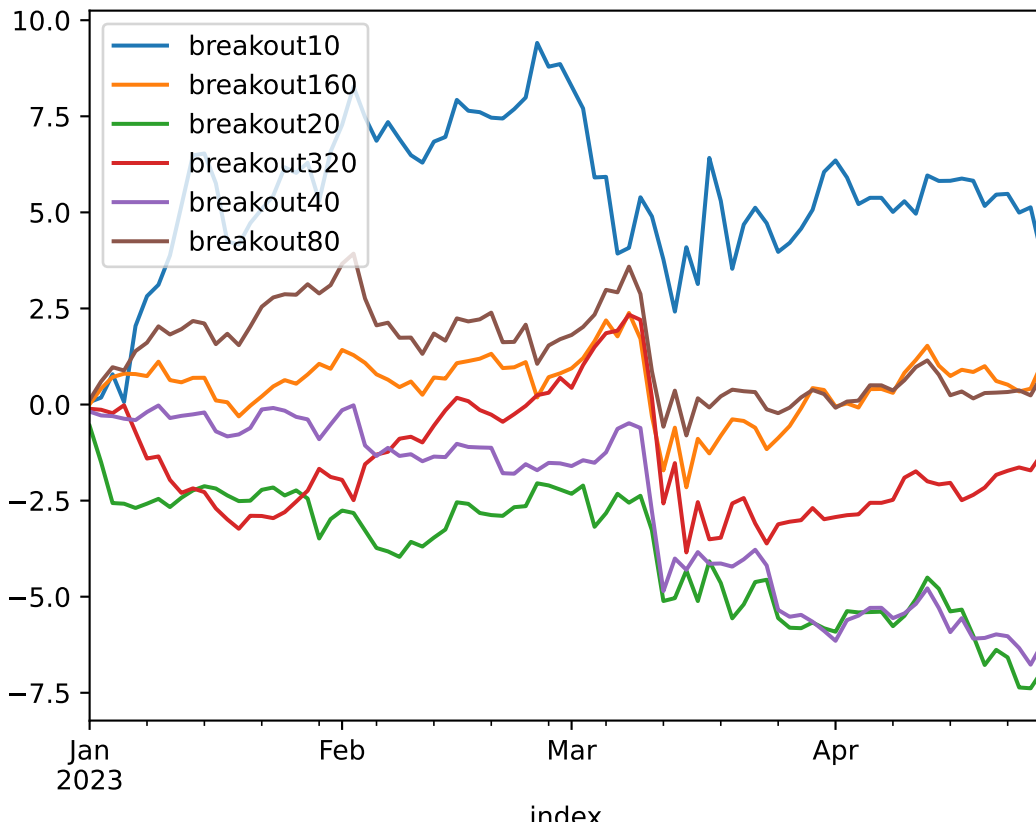


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 11.736, 'breakout160': 3.288, 'breakout20': -21.131, 'breakout320': -3.891, 'breakout40': -18.988, 'breakout80': 2.336}

ann. std {'breakout10': 13.948, 'breakout160': 7.889, 'breakout20': 7.779, 'breakout320': 9.561, 'breakout40': 7.377, 'breakout80': 7.894}

ann. SR {'breakout10': 0.84, 'breakout160': 0.42, 'breakout20': -2.72, 'breakout320': -0.41, 'breakout40': -2.57, 'breakout80': 0.3}

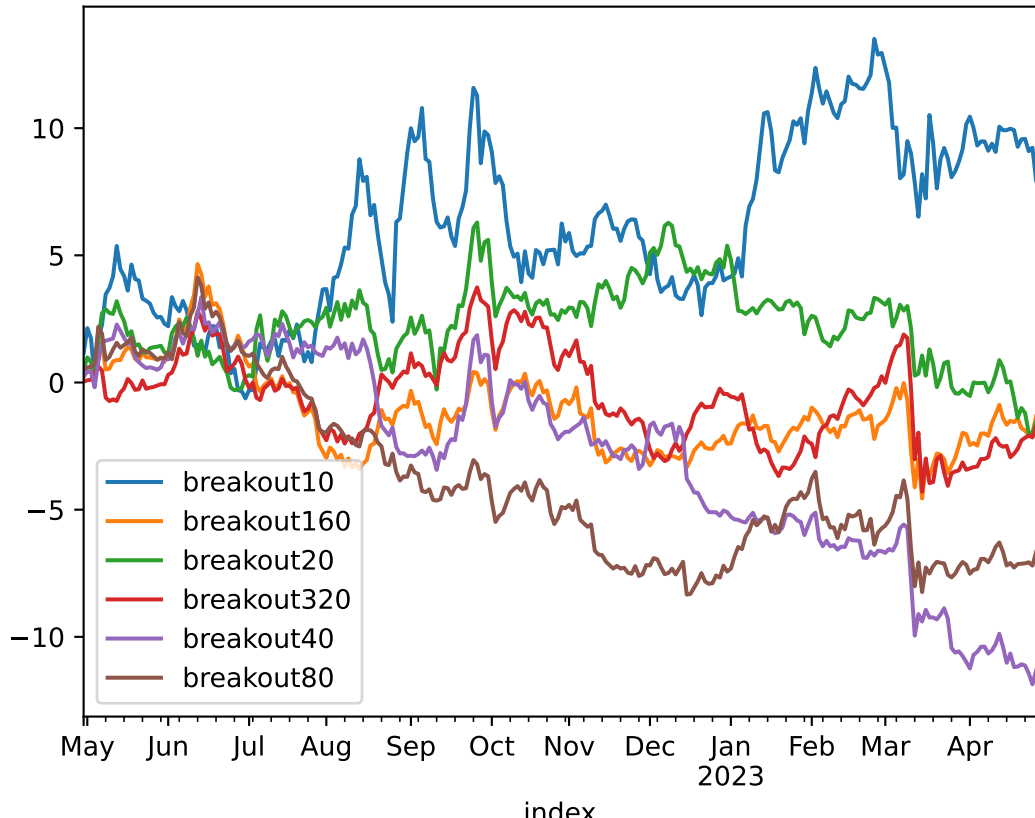


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 7.828, 'breakout160': -1.307, 'breakout20': -1.528, 'breakout320': -1.699, 'breakout40': -11.154, 'breakout80': -6.568}

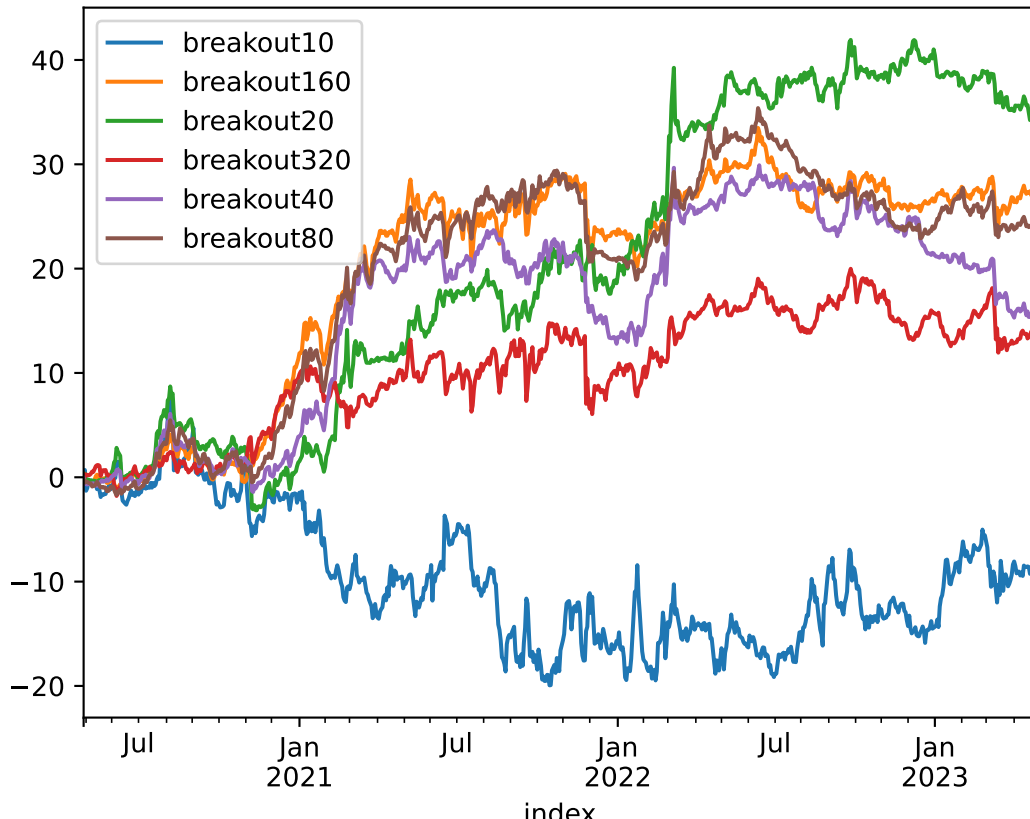
ann. std {'breakout10': 13.386, 'breakout160': 7.038, 'breakout20': 8.623, 'breakout320': 7.524, 'breakout40': 7.24, 'breakout80': 6.745}

ann. SR {'breakout10': 0.58, 'breakout160': -0.19, 'breakout20': -0.18, 'breakout320': -0.23, 'breakout40': -1.54, 'breakout80': -0.97}



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

ann. mean {'breakout10': -3.461, 'breakout160': 9.004, 'breakout20': 11.157, 'breakout320': 4.752, 'breakout40': 4.982, 'breakout80': 8.047}
 ann. std {'breakout10': 15.071, 'breakout160': 9.18, 'breakout20': 11.05, 'breakout320': 9.894, 'breakout40': 9.478, 'breakout80': 8.906}
 ann. SR {'breakout10': -0.23, 'breakout160': 0.98, 'breakout20': 1.01, 'breakout320': 0.48, 'breakout40': 0.53, 'breakout80': 0.9}

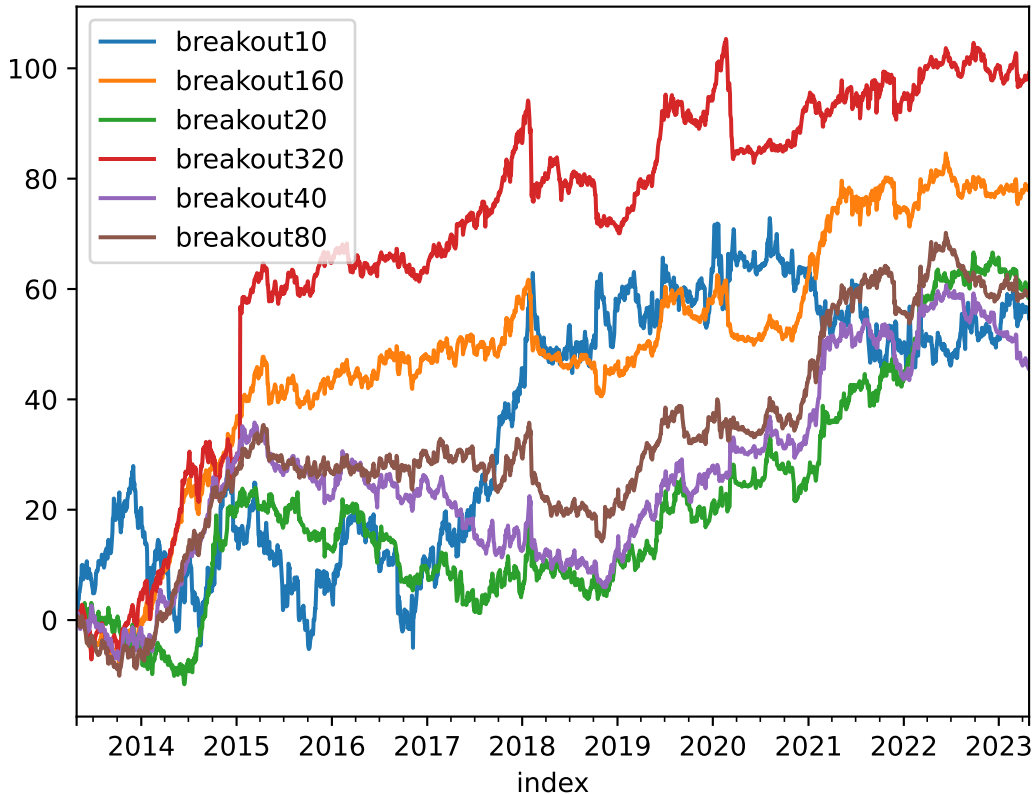


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 5.365, 'breakout160': 7.713, 'breakout20': 5.769, 'breakout320': 9.729, 'breakout40': 4.516, 'breakout80': 5.827}

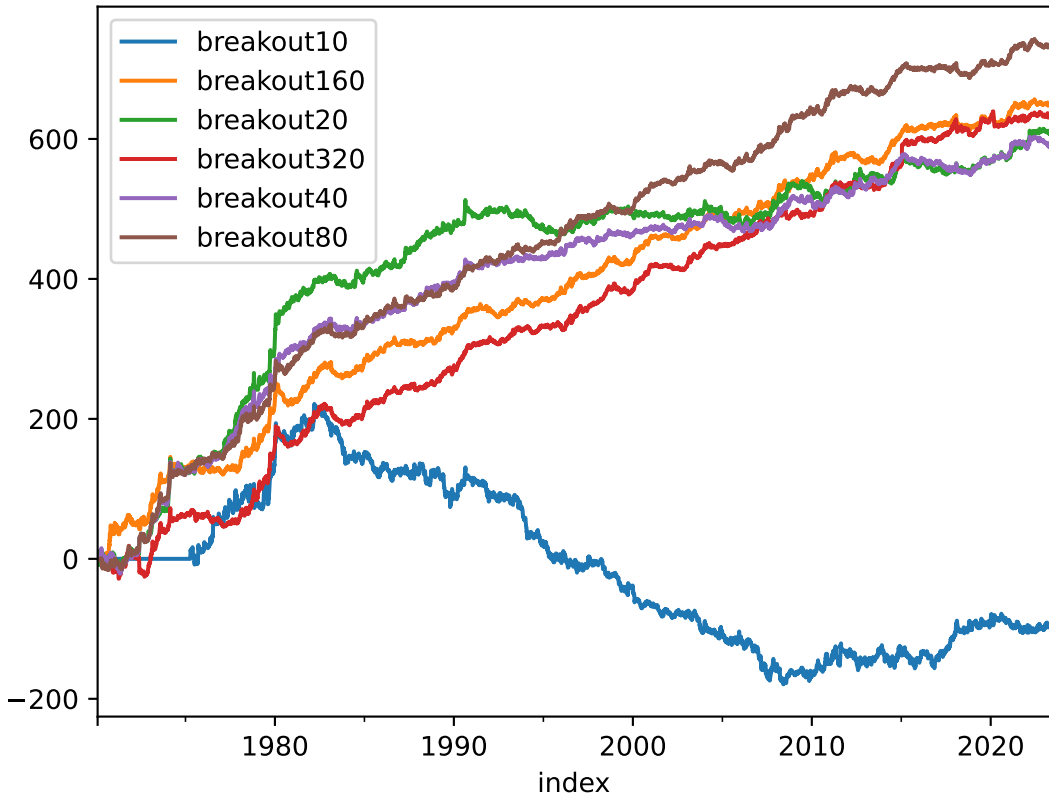
ann. std {'breakout10': 17.809, 'breakout160': 8.872, 'breakout20': 11.085, 'breakout320': 13.081, 'breakout40': 9.39, 'breakout80': 8.73}

ann. SR {'breakout10': 0.3, 'breakout160': 0.87, 'breakout20': 0.52, 'breakout320': 0.74, 'breakout40': 0.48, 'breakout80': 0.67}



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

ann. mean {'breakout10': -1.78, 'breakout160': 11.996, 'breakout20': 11.184, 'breakout320': 11.673, 'breakout40': 10.85, 'breakout80': 13.495}
ann. std {'breakout10': 21.318, 'breakout160': 11.528, 'breakout20': 14.889, 'breakout320': 12.114, 'breakout40': 12.111, 'breakout80': 11.716}
ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

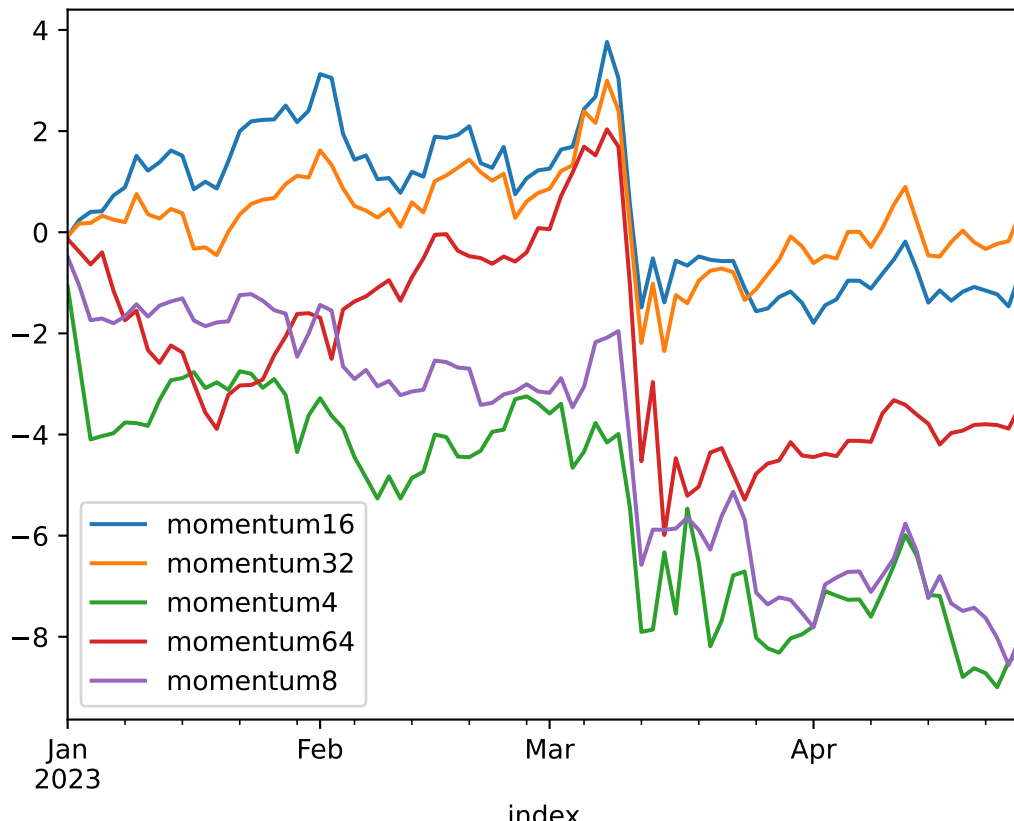


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.464, 'momentum32': 1.143, 'momentum4': -25.333, 'momentum64': -10.469, 'momentum8': -24.414}

ann. std {'momentum16': 8.801, 'momentum32': 8.788, 'momentum4': 11.072, 'momentum64': 11.721, 'momentum8': 8.764}

ann. SR {'momentum16': -0.28, 'momentum32': 0.13, 'momentum4': -2.29, 'momentum64': -0.89, 'momentum8': -2.79}

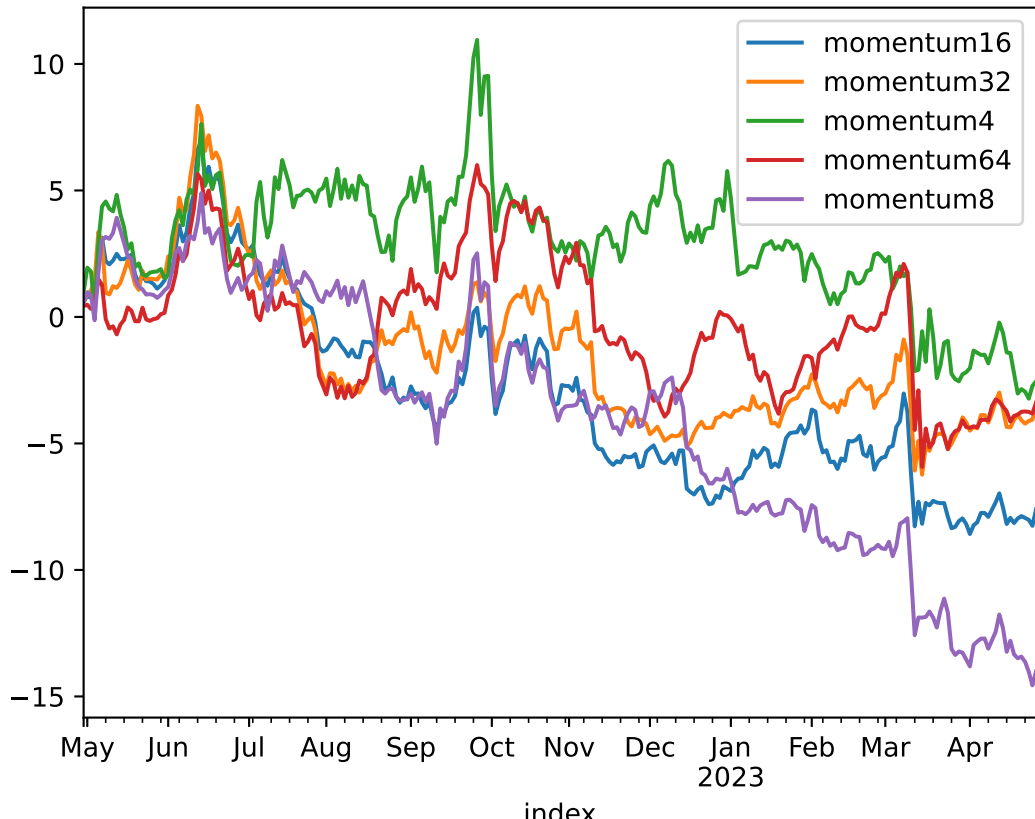


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -7.48, 'momentum32': -3.456, 'momentum4': -2.505, 'momentum64': -3.322, 'momentum8': -13.794}

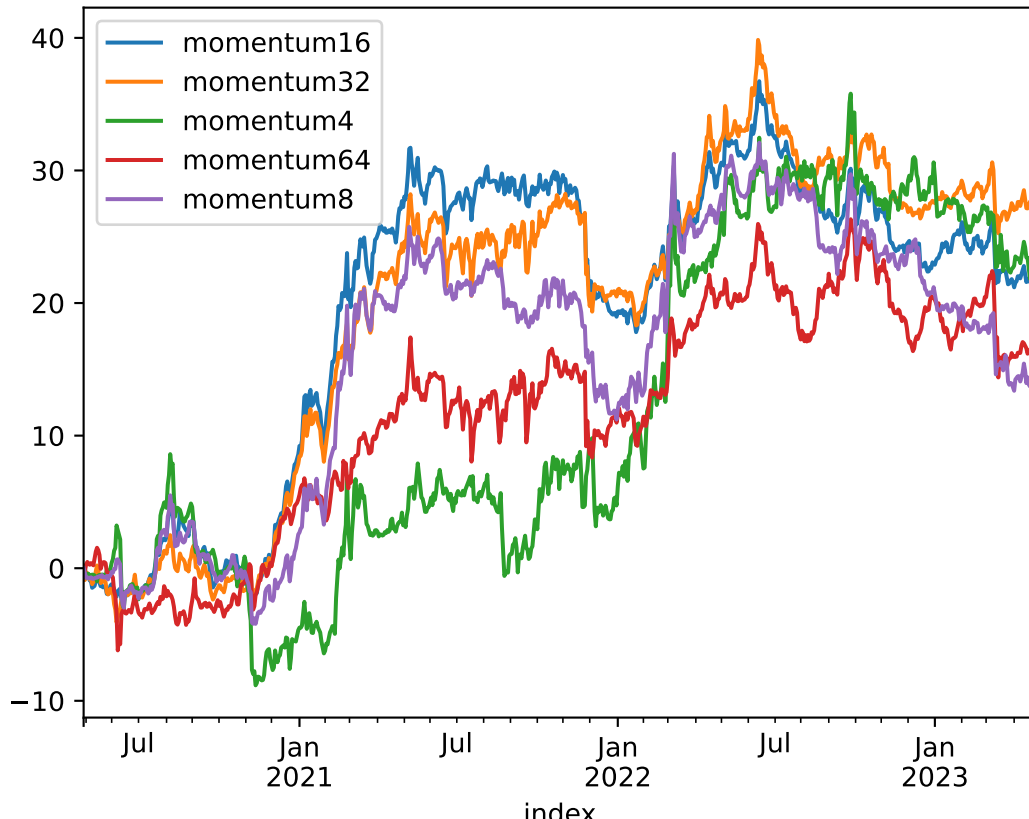
ann. std {'momentum16': 8.816, 'momentum32': 9.25, 'momentum4': 13.522, 'momentum64': 10.24, 'momentum8': 10.034}

ann. SR {'momentum16': -0.85, 'momentum32': -0.37, 'momentum4': -0.19, 'momentum64': -0.32, 'momentum8': -1.37}



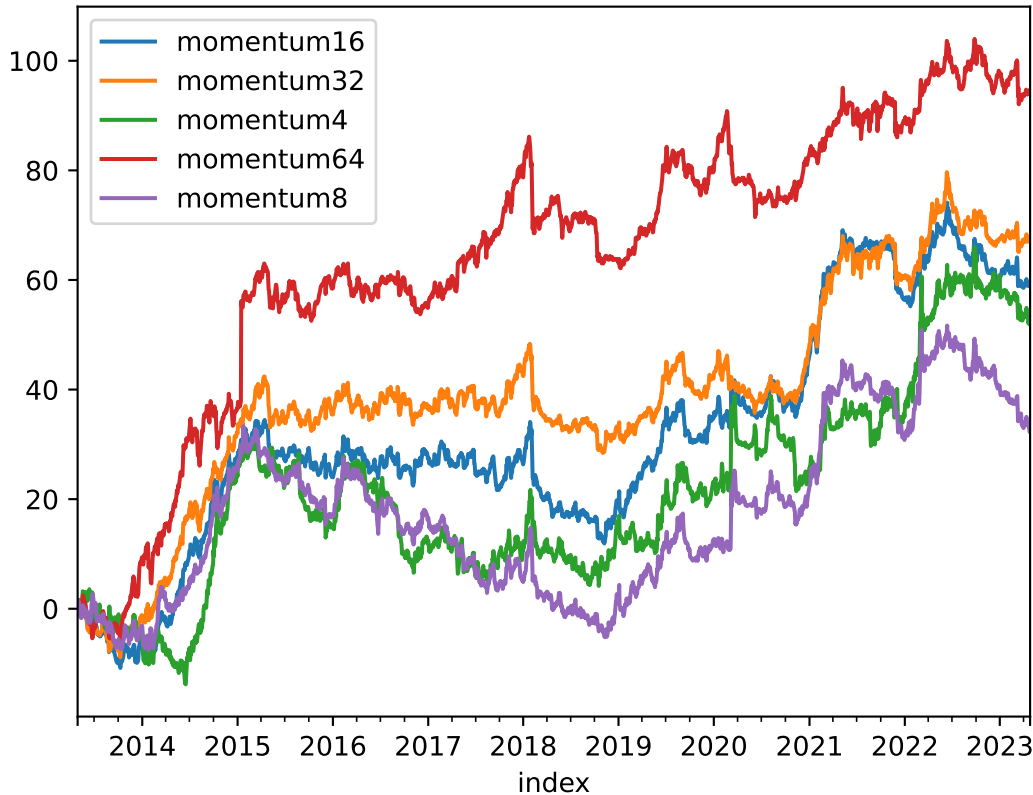
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.257, 'momentum32': 9.163, 'momentum4': 7.3, 'momentum64': 5.547, 'momentum8': 4.317}
ann. std {'momentum16': 10.13, 'momentum32': 10.389, 'momentum4': 14.631, 'momentum64': 10.818, 'momentum8': 11.417}
ann. SR {'momentum16': 0.72, 'momentum32': 0.88, 'momentum4': 0.5, 'momentum64': 0.51, 'momentum8': 0.38}



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

ann. mean {'momentum16': 5.842, 'momentum32': 6.655, 'momentum4': 5.16, 'momentum64': 9.284, 'momentum8': 3.215}
ann. std {'momentum16': 9.662, 'momentum32': 9.274, 'momentum4': 13.675, 'momentum64': 11.867, 'momentum8': 10.868}
ann. SR {'momentum16': 0.6, 'momentum32': 0.72, 'momentum4': 0.38, 'momentum64': 0.78, 'momentum8': 0.3}

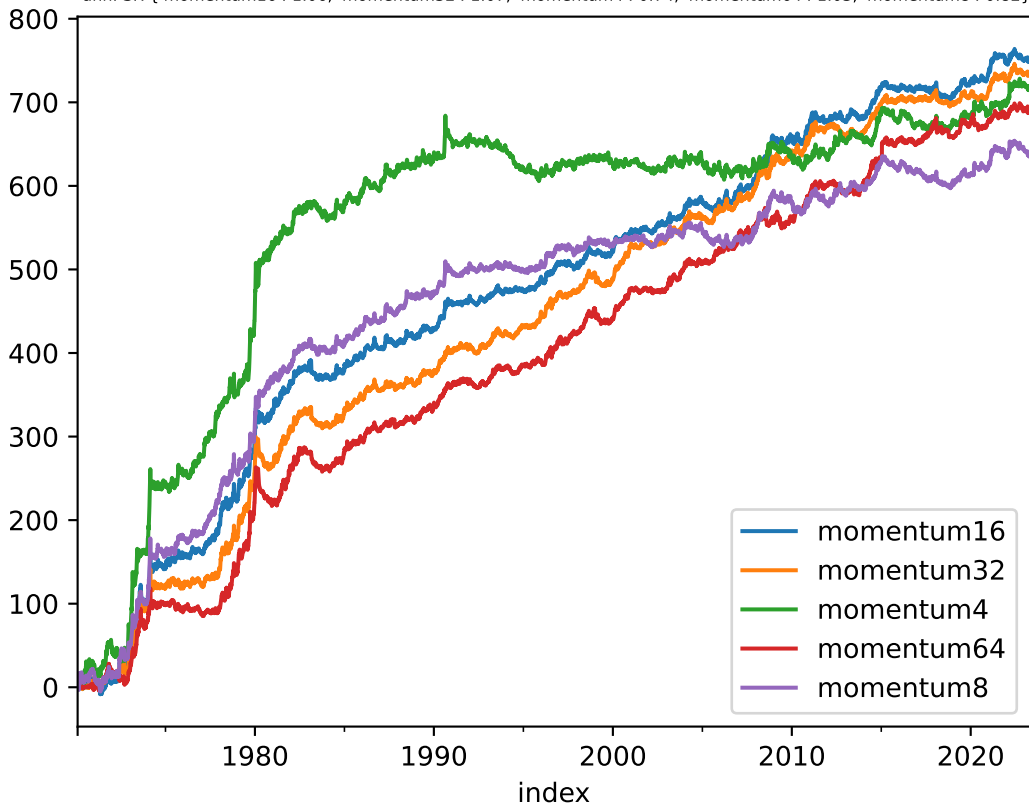


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.813, 'momentum32': 13.535, 'momentum4': 13.176, 'momentum64': 12.713, 'momentum8': 11.708}

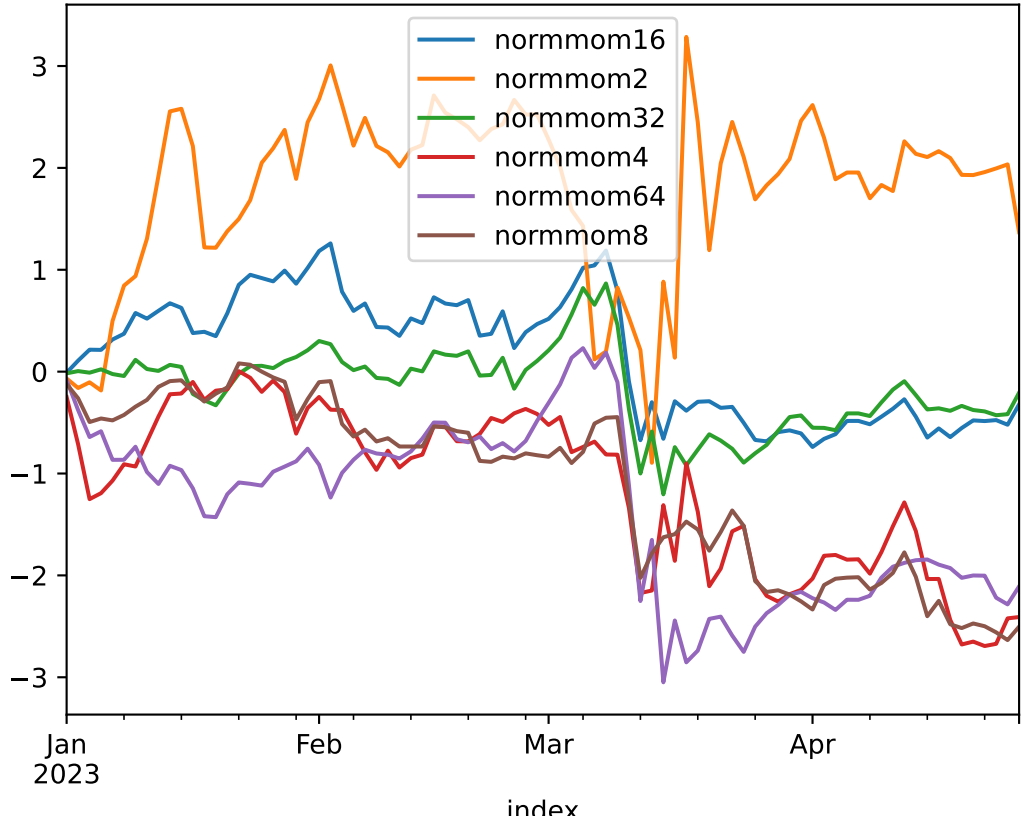
ann. std {'momentum16': 13.046, 'momentum32': 12.609, 'momentum4': 17.891, 'momentum64': 12.33, 'momentum8': 14.33}

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': -0.98, 'normmom2': 4.173, 'normmom32': -0.63, 'normmom4': -7.341, 'normmom64': -6.424, 'normmom8': -7.63}
ann. std {'normmom16': 3.157, 'normmom2': 9.086, 'normmom32': 3.091, 'normmom4': 4.493, 'normmom64': 4.573, 'normmom8': 3.079}
ann. SR {'normmom16': -0.31, 'normmom2': 0.46, 'normmom32': -0.2, 'normmom4': -1.63, 'normmom64': -1.4, 'normmom8': -2.48}

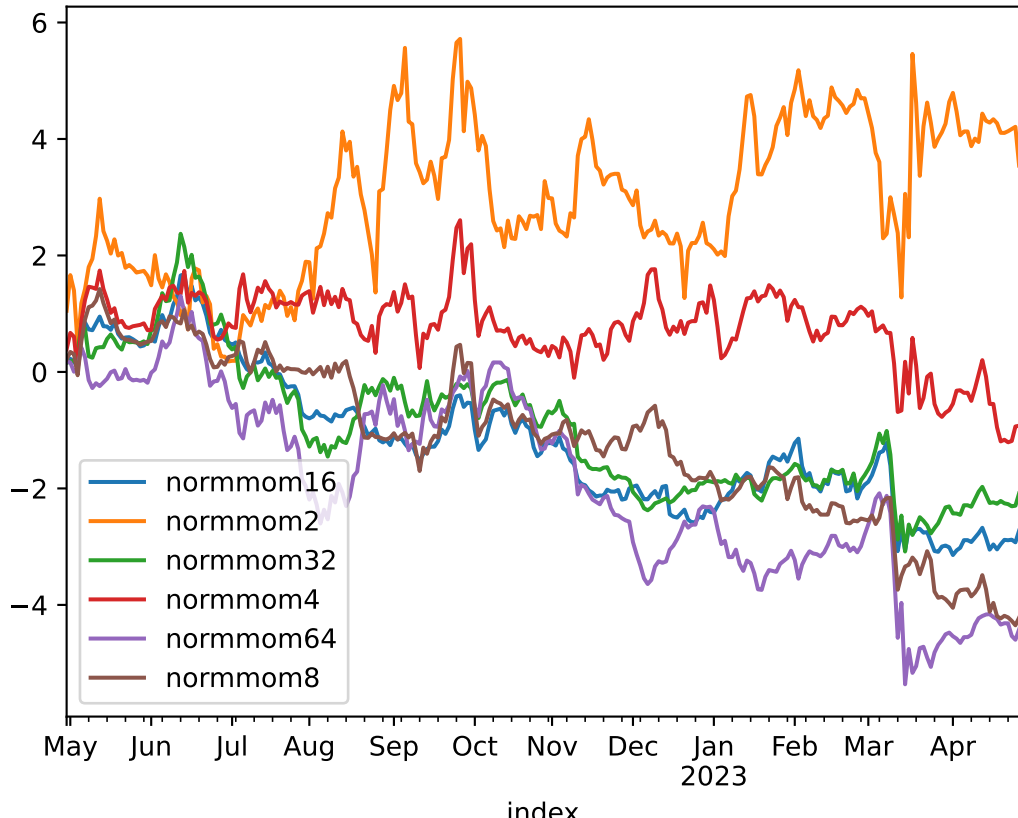


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.684, 'normmom2': 3.489, 'normmom32': -2.053, 'normmom4': -0.909, 'normmom64': -4.354, 'normmom8': -4.154}

ann. std {'normmom16': 2.621, 'normmom2': 7.618, 'normmom32': 2.908, 'normmom4': 4.381, 'normmom64': 3.821, 'normmom8': 2.989}

ann. SR {'normmom16': -1.02, 'normmom2': 0.46, 'normmom32': -0.71, 'normmom4': -0.21, 'normmom64': -1.14, 'normmom8': -1.39}

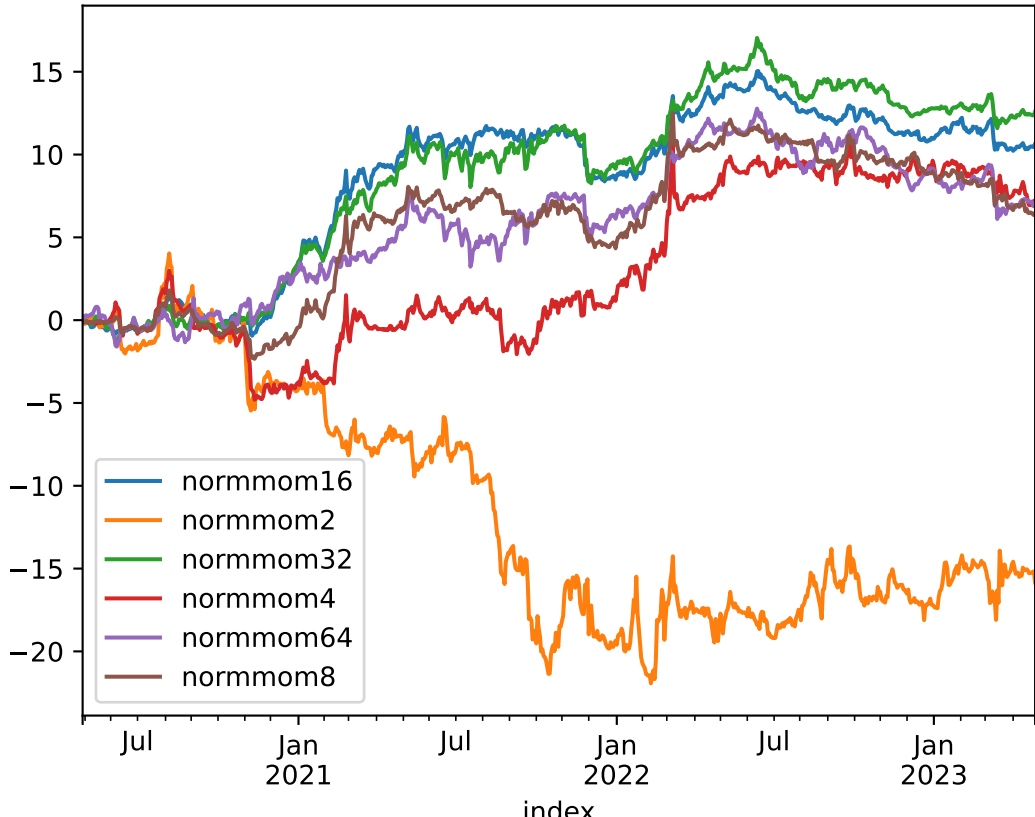


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.484, 'normmom2': -5.184, 'normmom32': 4.12, 'normmom4': 2.364, 'normmom64': 2.308, 'normmom8': 2.12}

ann. std {'normmom16': 3.509, 'normmom2': 8.622, 'normmom32': 3.878, 'normmom4': 5.37, 'normmom64': 4.272, 'normmom8': 3.927}

ann. SR {'normmom16': 0.99, 'normmom2': -0.6, 'normmom32': 1.06, 'normmom4': 0.44, 'normmom64': 0.54, 'normmom8': 0.54}

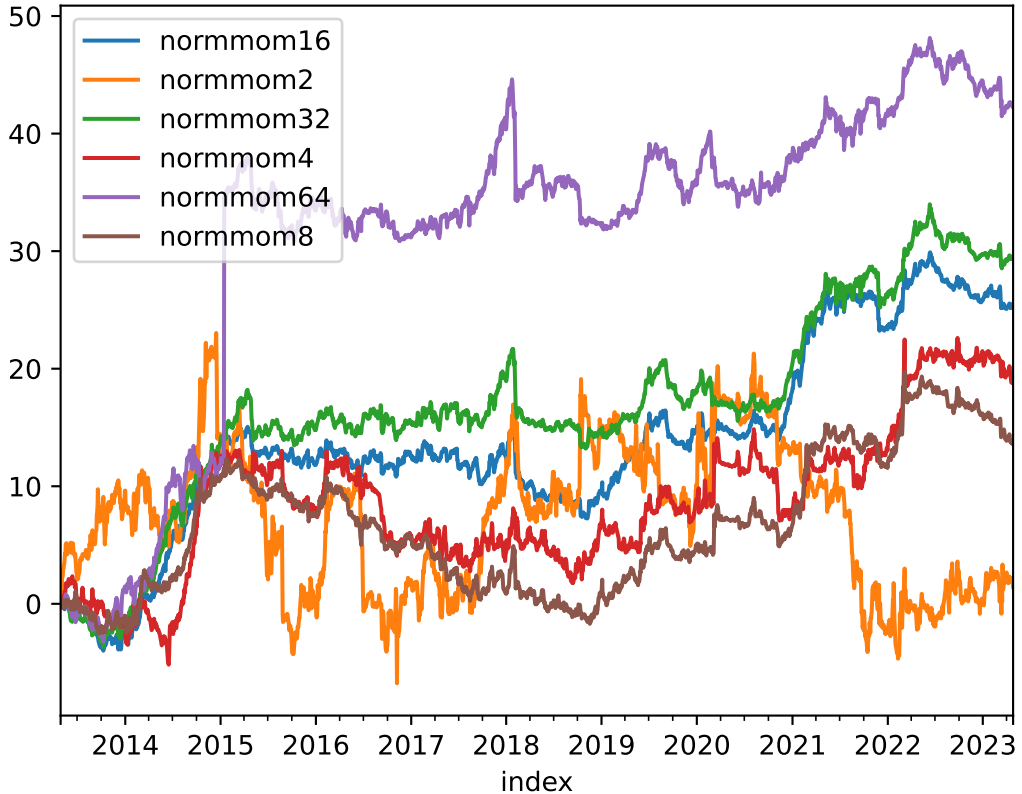


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.502, 'normmom2': 0.139, 'normmom32': 2.898, 'normmom4': 1.873, 'normmom64': 4.162, 'normmom8': 1.344}

ann. std {'normmom16': 3.465, 'normmom2': 10.318, 'normmom32': 3.622, 'normmom4': 5.441, 'normmom64': 8.27, 'normmom8': 3.881}

ann. SR {'normmom16': 0.72, 'normmom2': 0.01, 'normmom32': 0.8, 'normmom4': 0.34, 'normmom64': 0.5, 'normmom8': 0.35}

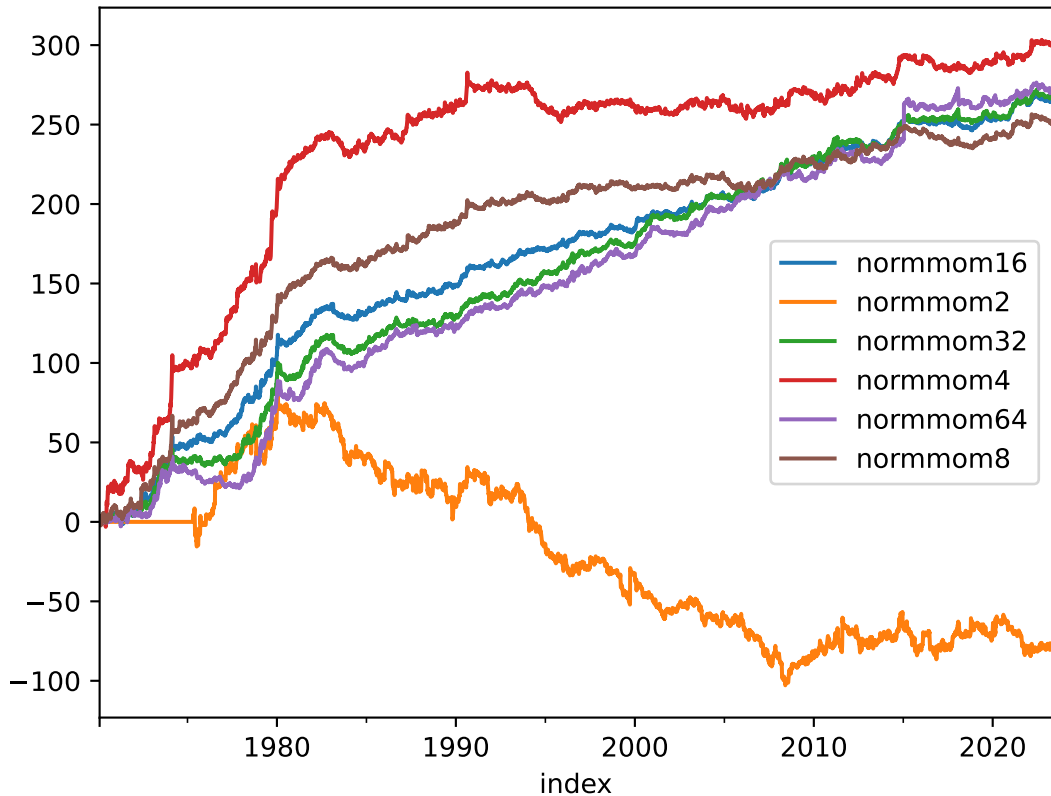


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.878, 'normmom2': -1.443, 'normmom32': 4.929, 'normmom4': 5.525, 'normmom64': 4.99, 'normmom8': 4.617}

ann. std {'normmom16': 4.532, 'normmom2': 11.61, 'normmom32': 4.609, 'normmom4': 7.384, 'normmom64': 5.869, 'normmom8': 5.365}

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

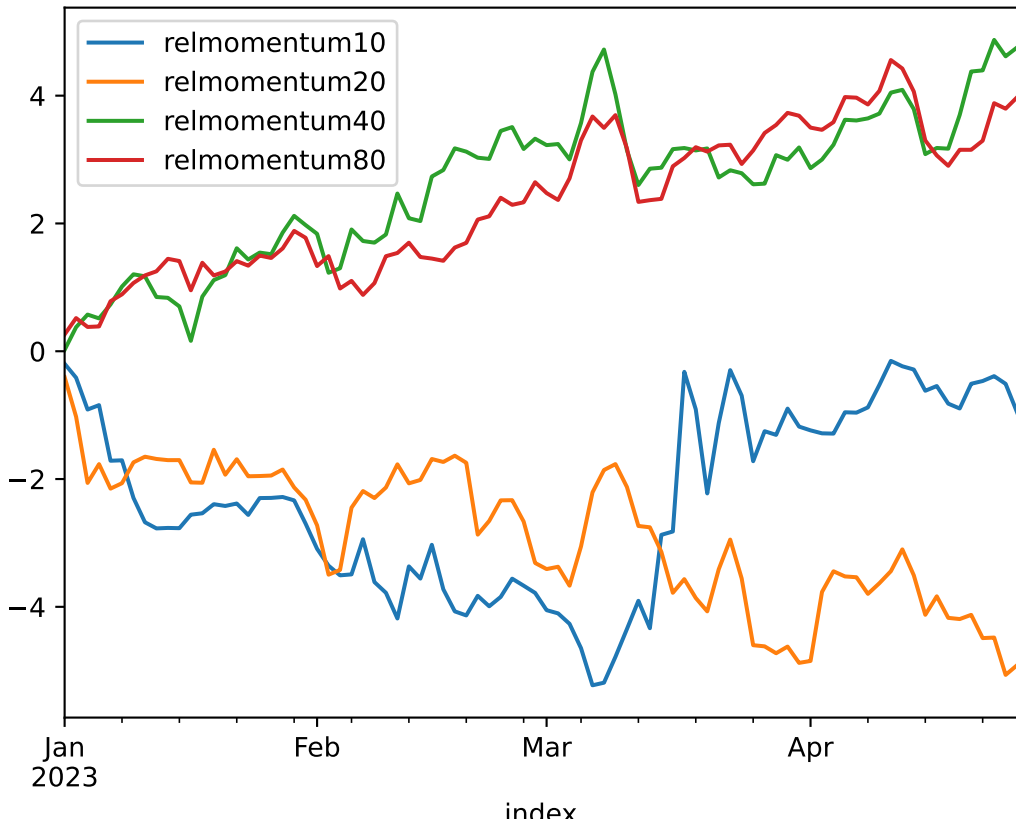


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -2.917, 'relmomentum20': -14.974, 'relmomentum40': 14.49, 'relmomentum80': 12.113}

ann. std {'relmomentum10': 8.096, 'relmomentum20': 6.602, 'relmomentum40': 5.34, 'relmomentum80': 4.335}

ann. SR {'relmomentum10': -0.36, 'relmomentum20': -2.27, 'relmomentum40': 2.71, 'relmomentum80': 2.79}

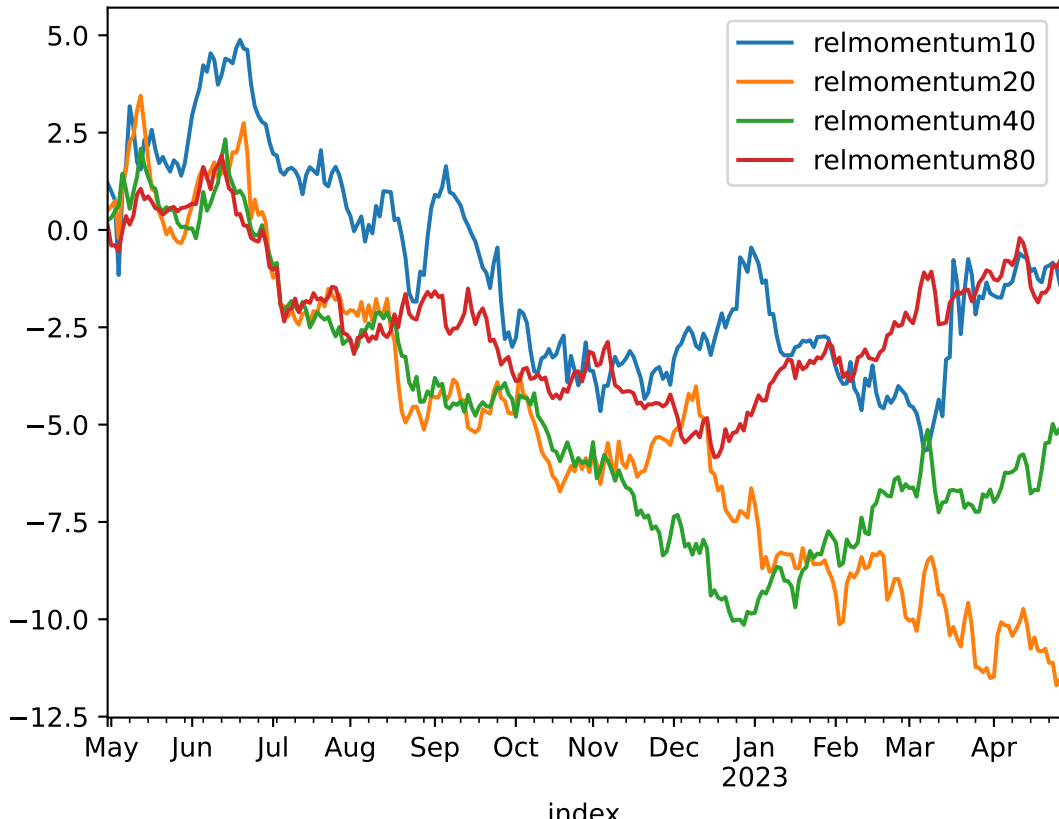


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.385, 'relmomentum20': -11.366, 'relmomentum40': -5.022, 'relmomentum80': -0.778}

ann. std {'relmomentum10': 8.038, 'relmomentum20': 6.646, 'relmomentum40': 5.334, 'relmomentum80': 4.547}

ann. SR {'relmomentum10': -0.17, 'relmomentum20': -1.71, 'relmomentum40': -0.94, 'relmomentum80': -0.17}

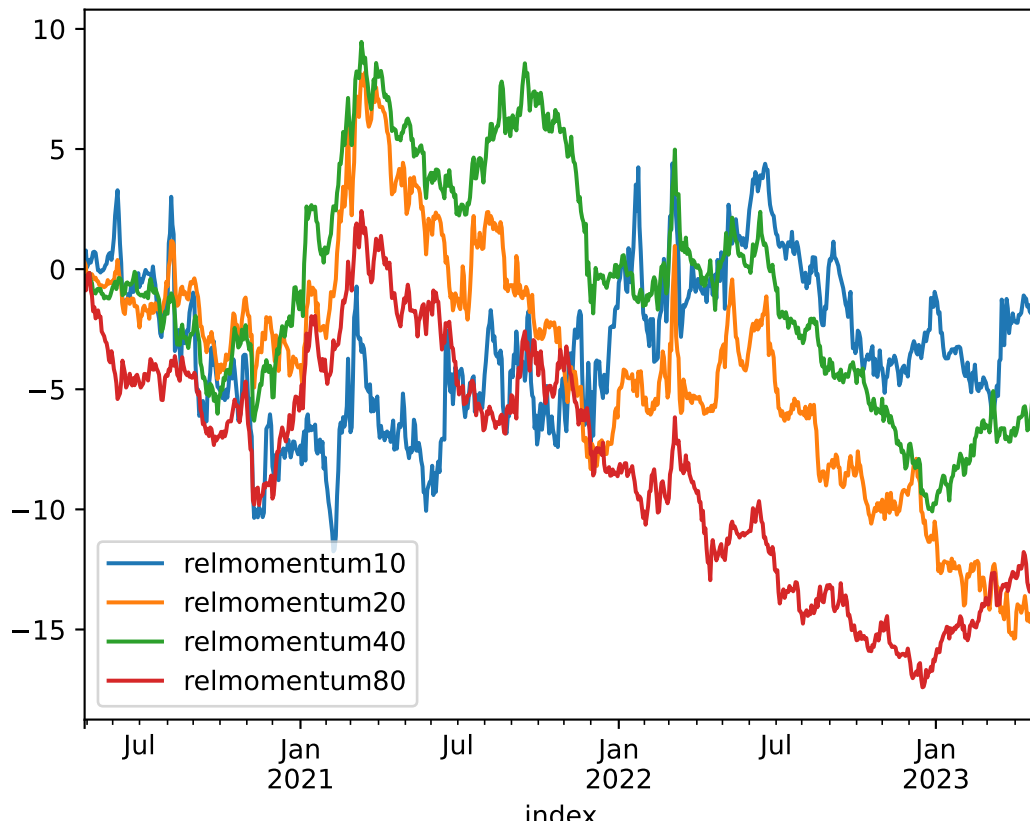


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.622, 'relmomentum20': -5.048, 'relmomentum40': -1.651, 'relmomentum80': -4.045}

ann. std {'relmomentum10': 11.917, 'relmomentum20': 8.344, 'relmomentum40': 6.95, 'relmomentum80': 6.344}

ann. SR {'relmomentum10': -0.05, 'relmomentum20': -0.6, 'relmomentum40': -0.24, 'relmomentum80': -0.64}

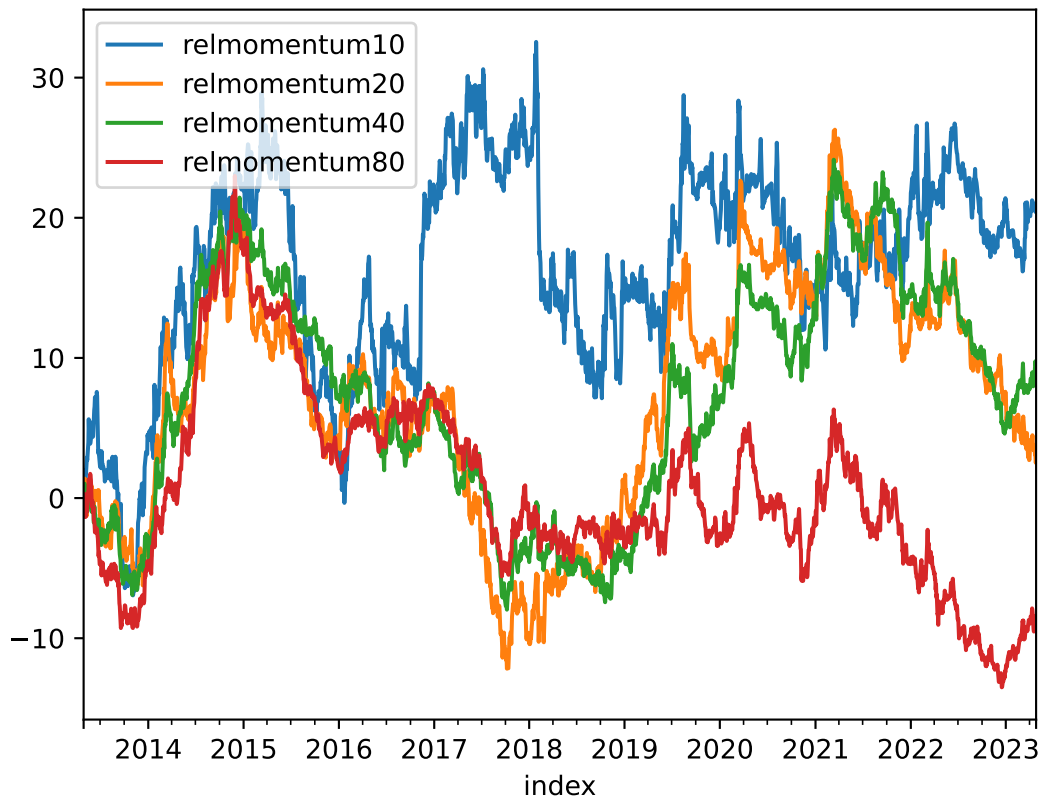


Total Trading Rule P&L for period '10Y'

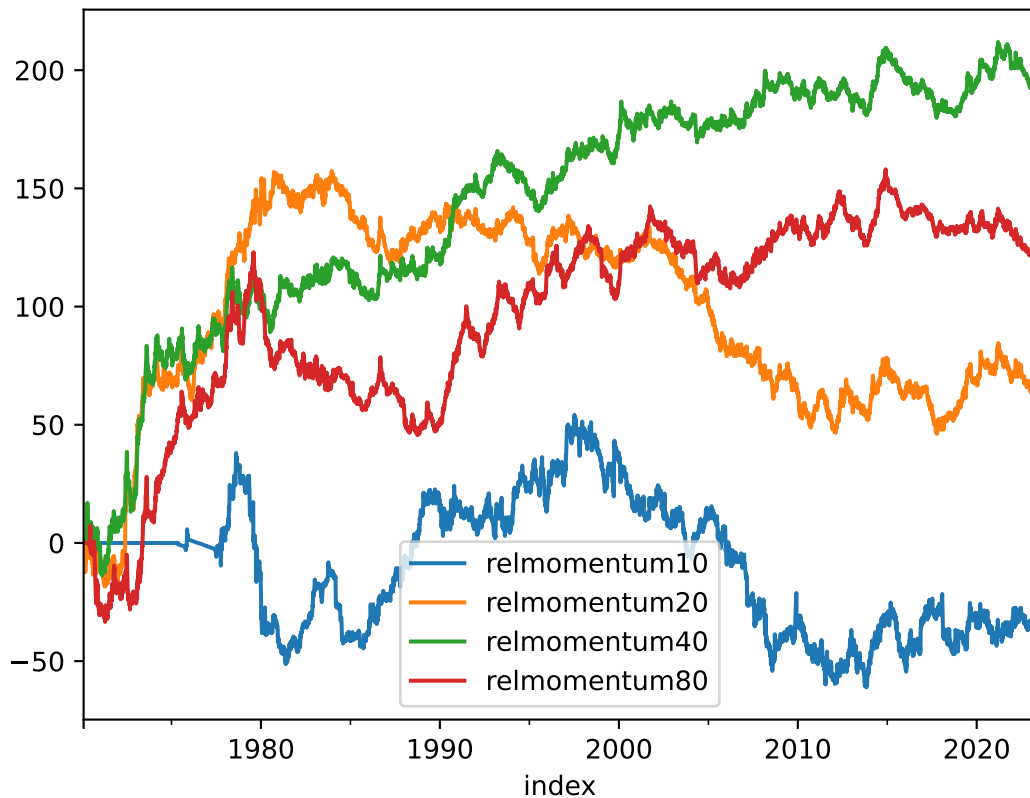
ann. mean {'relmomentum10': 2.006, 'relmomentum20': 0.262, 'relmomentum40': 0.946, 'relmomentum80': -0.829}

ann. std {'relmomentum10': 13.407, 'relmomentum20': 8.57, 'relmomentum40': 7.007, 'relmomentum80': 6.386}

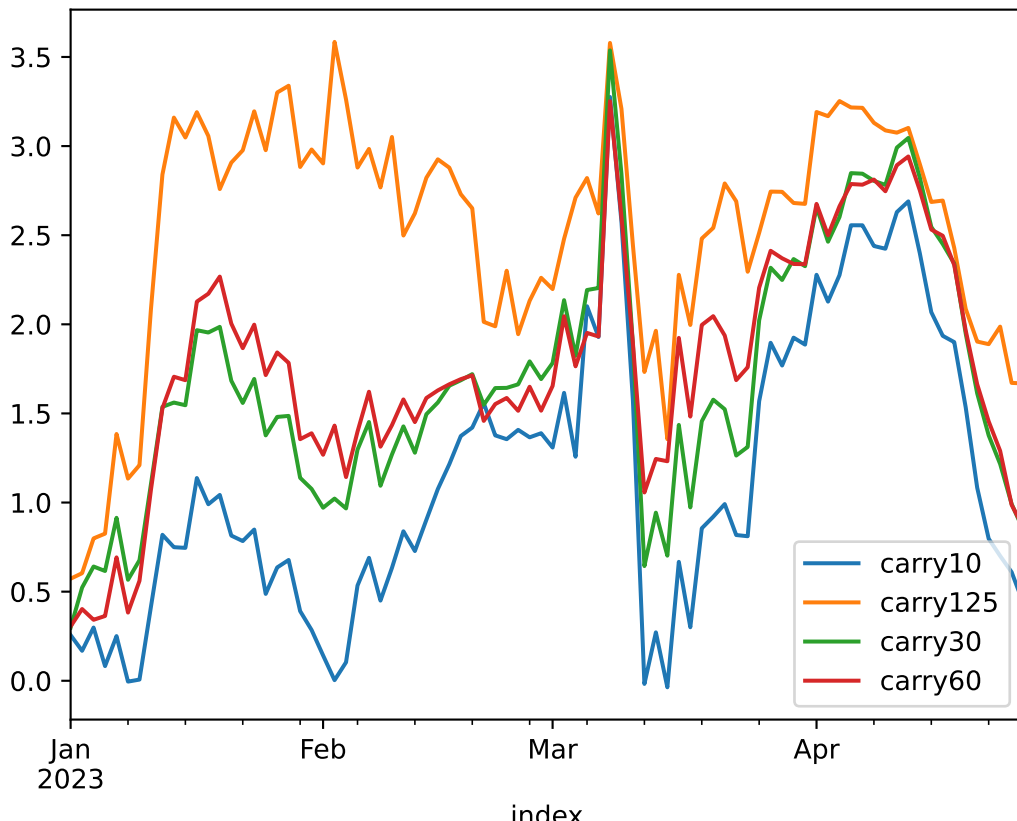
ann. SR {'relmomentum10': 0.15, 'relmomentum20': 0.03, 'relmomentum40': 0.14, 'relmomentum80': -0.13}



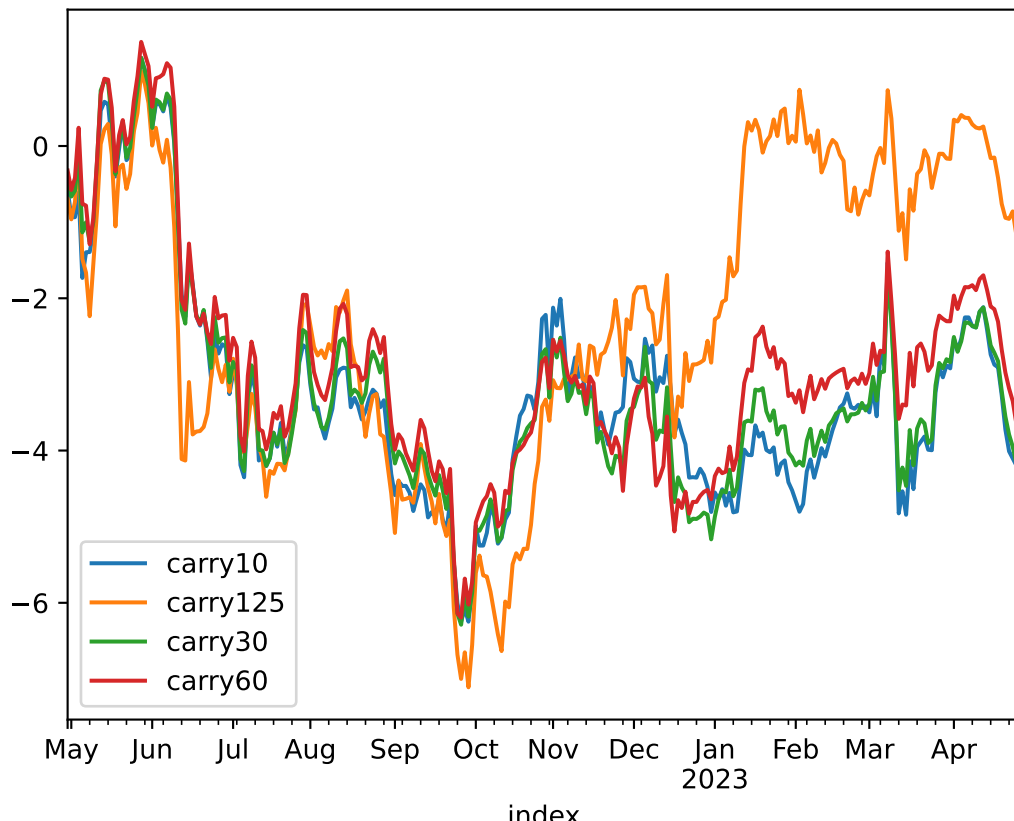
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.621, 'relmomentum20': 1.124, 'relmomentum40': 3.64, 'relmomentum80': 2.335}
ann. std {'relmomentum10': 13.389, 'relmomentum20': 10.468, 'relmomentum40': 9.638, 'relmomentum80': 9.783}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 1.336, 'carry125': 5.084, 'carry30': 2.584, 'carry60': 2.629}
ann. std {'carry10': 5.909, 'carry125': 5.453, 'carry30': 5.419, 'carry60': 4.856}
ann. SR {'carry10': 0.23, 'carry125': 0.93, 'carry30': 0.48, 'carry60': 0.54}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -4.301, 'carry125': -1.16, 'carry30': -4.252, 'carry60': -3.719}
ann. std {'carry10': 6.077, 'carry125': 6.697, 'carry30': 6.044, 'carry60': 5.996}
ann. SR {'carry10': -0.71, 'carry125': -0.17, 'carry30': -0.7, 'carry60': -0.62}

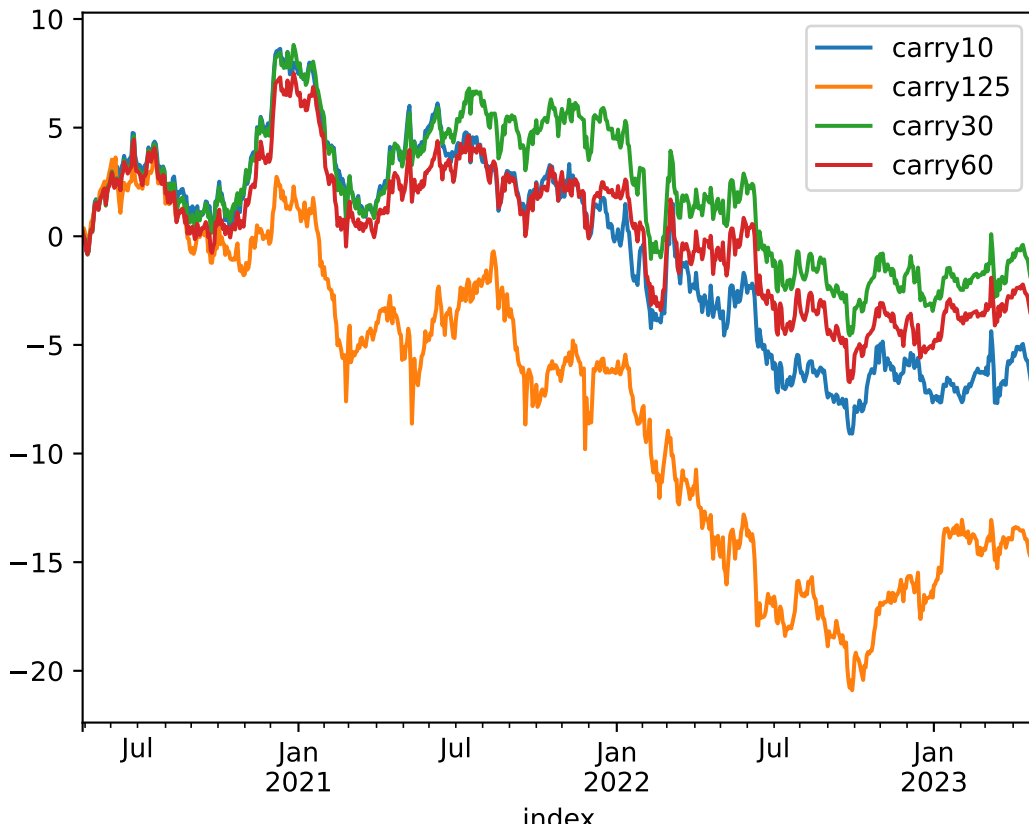


Total Trading Rule P&L for period '3Y'

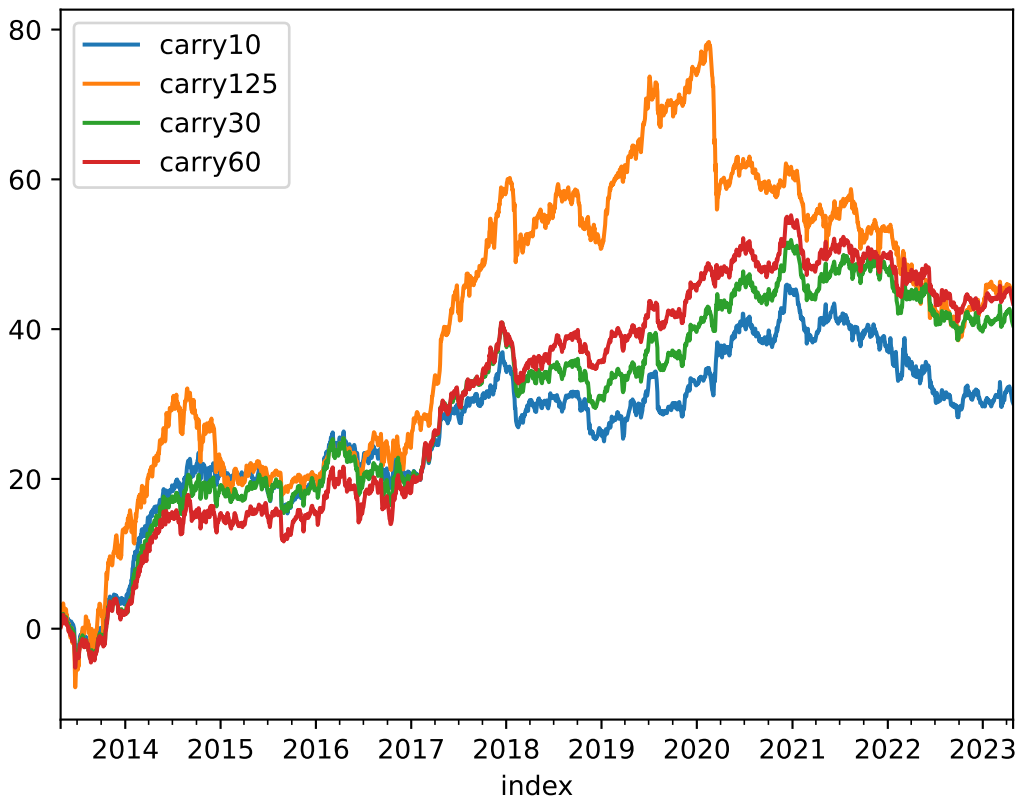
ann. mean {'carry10': -2.359, 'carry125': -4.899, 'carry30': -0.848, 'carry60': -1.407}

ann. std {'carry10': 6.55, 'carry125': 7.99, 'carry30': 6.478, 'carry60': 6.463}

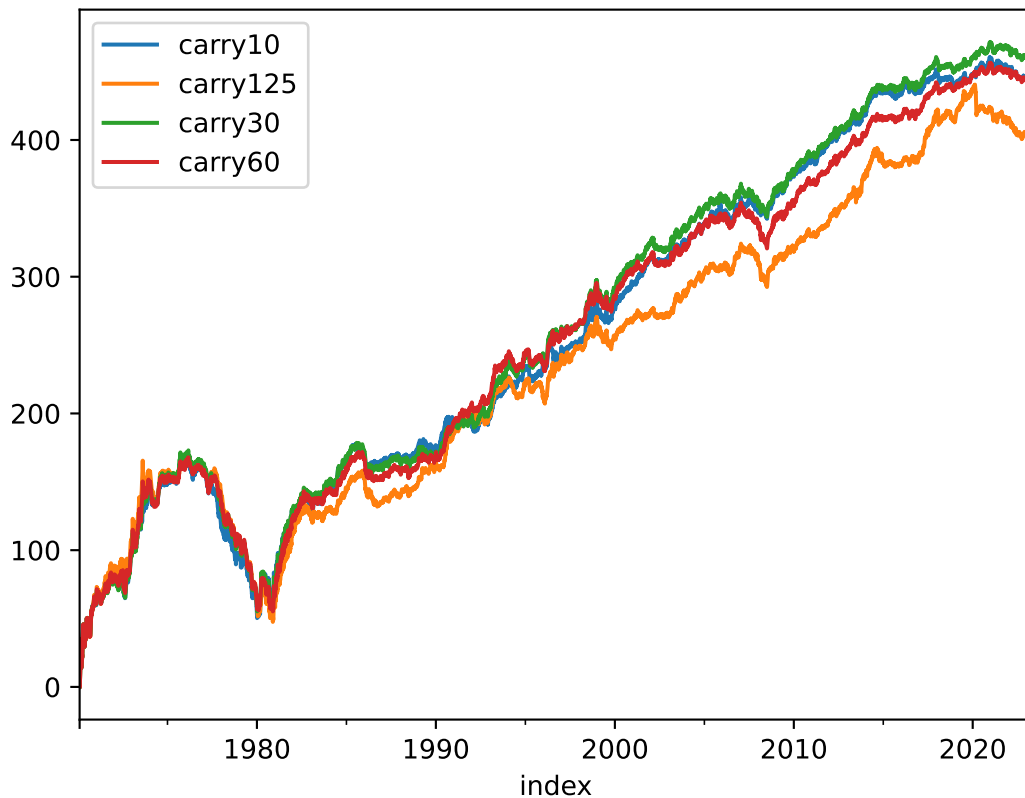
ann. SR {'carry10': -0.36, 'carry125': -0.61, 'carry30': -0.13, 'carry60': -0.22}



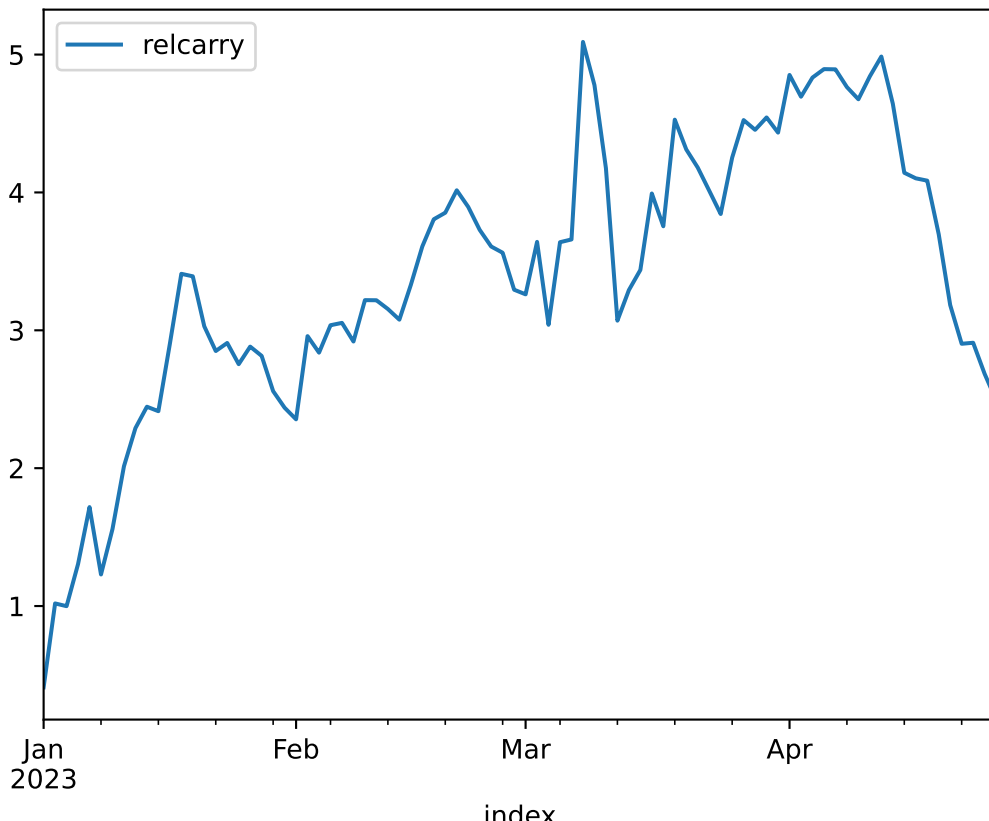
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.955, 'carry125': 4.36, 'carry30': 3.975, 'carry60': 4.259}
ann. std {'carry10': 6.364, 'carry125': 8.955, 'carry30': 6.455, 'carry60': 6.407}
ann. SR {'carry10': 0.46, 'carry125': 0.49, 'carry30': 0.62, 'carry60': 0.66}



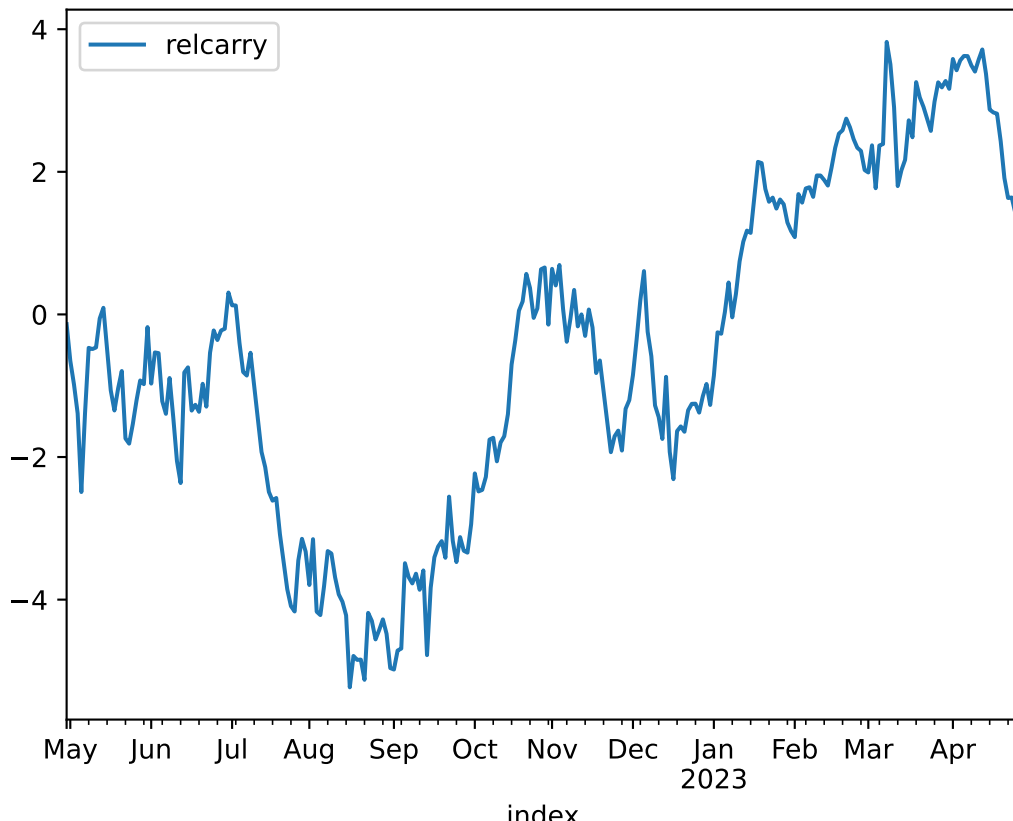
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.199, 'carry125': 7.495, 'carry30': 8.485, 'carry60': 8.197}
ann. std {'carry10': 11.2, 'carry125': 11.557, 'carry30': 11.257, 'carry60': 11.26}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 7.599}
ann. std {'relcarry': 5.645}
ann. SR {'relcarry': 1.35}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 1.205}
ann. std {'relcarry': 6.944}
ann. SR {'relcarry': 0.17}

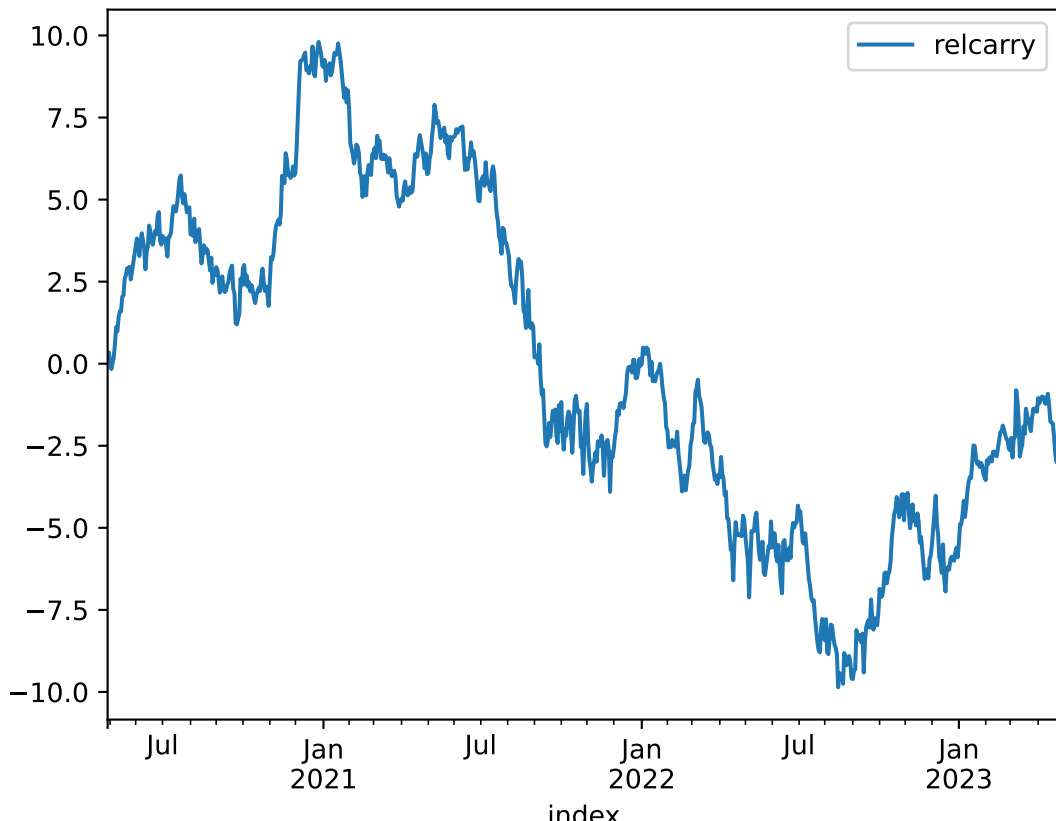


Total Trading Rule P&L for period '3Y'

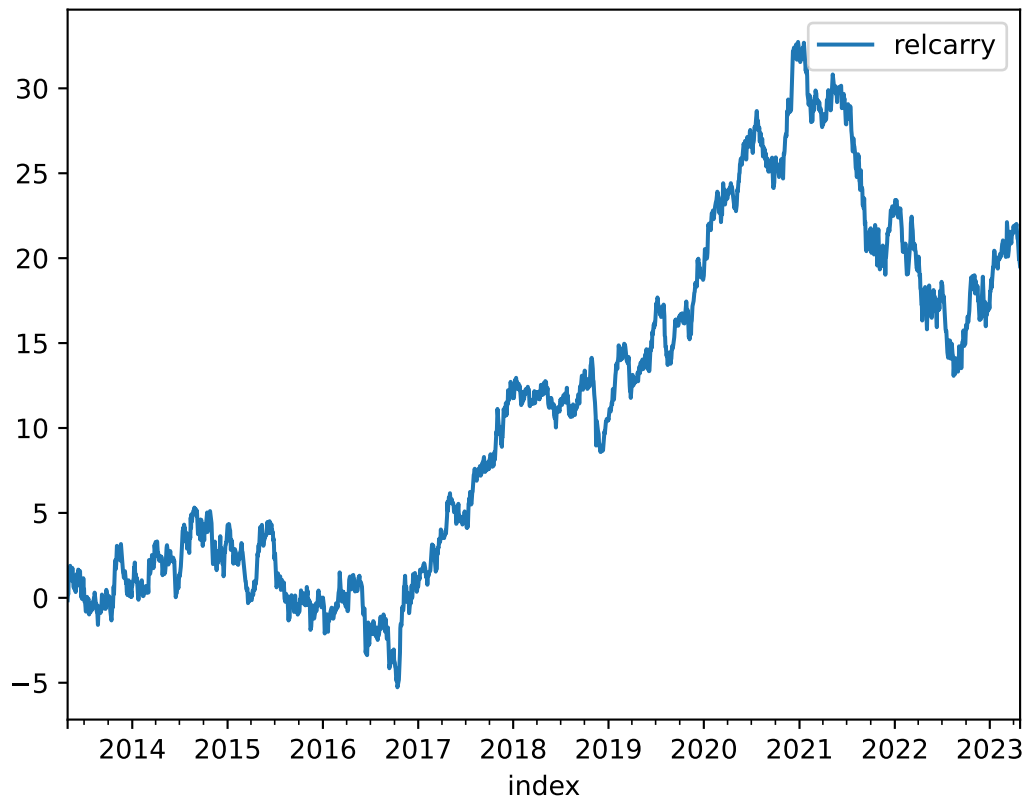
ann. mean {'relcarry': -1.115}

ann. std {'relcarry': 6.656}

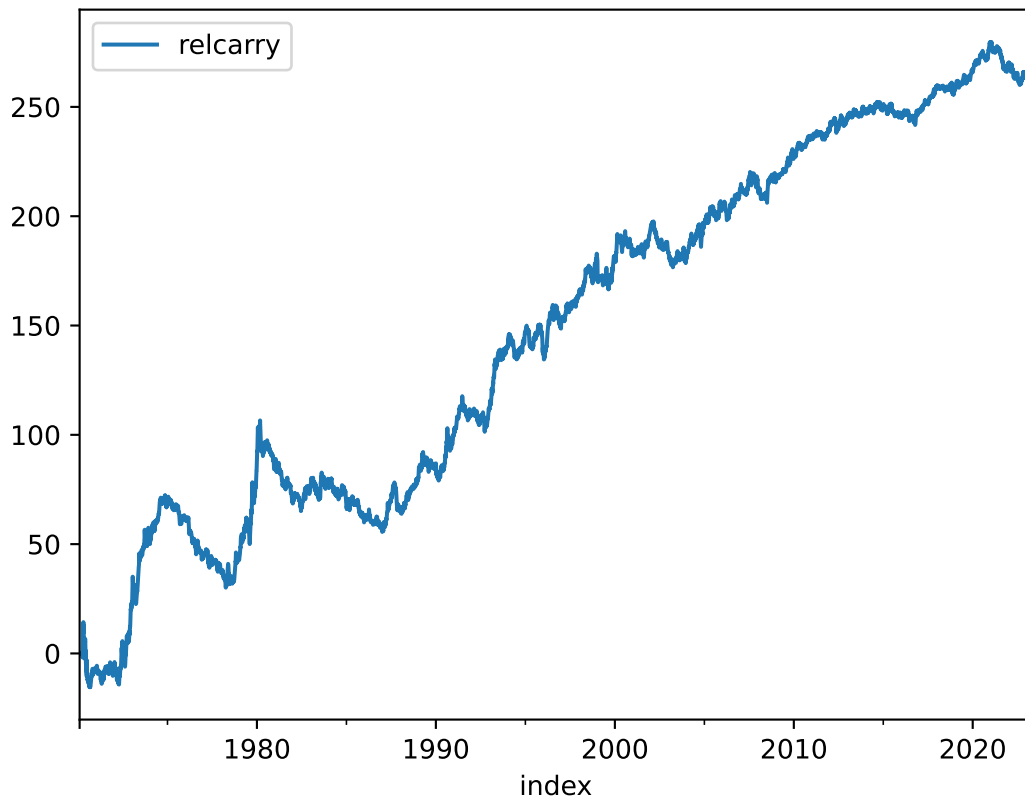
ann. SR {'relcarry': -0.17}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.916}
ann. std {'relcarry': 5.823}
ann. SR {'relcarry': 0.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.913}
ann. std {'relcarry': 8.96}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -3.197, 'skewabs365': -21.349, 'skewrv180': -18.519, 'skewrv365': -26.159}
ann. std {'skewabs180': 11.408, 'skewabs365': 11.77, 'skewrv180': 8.184, 'skewrv365': 8.022}
ann. SR {'skewabs180': -0.28, 'skewabs365': -1.81, 'skewrv180': -2.26, 'skewrv365': -3.26}

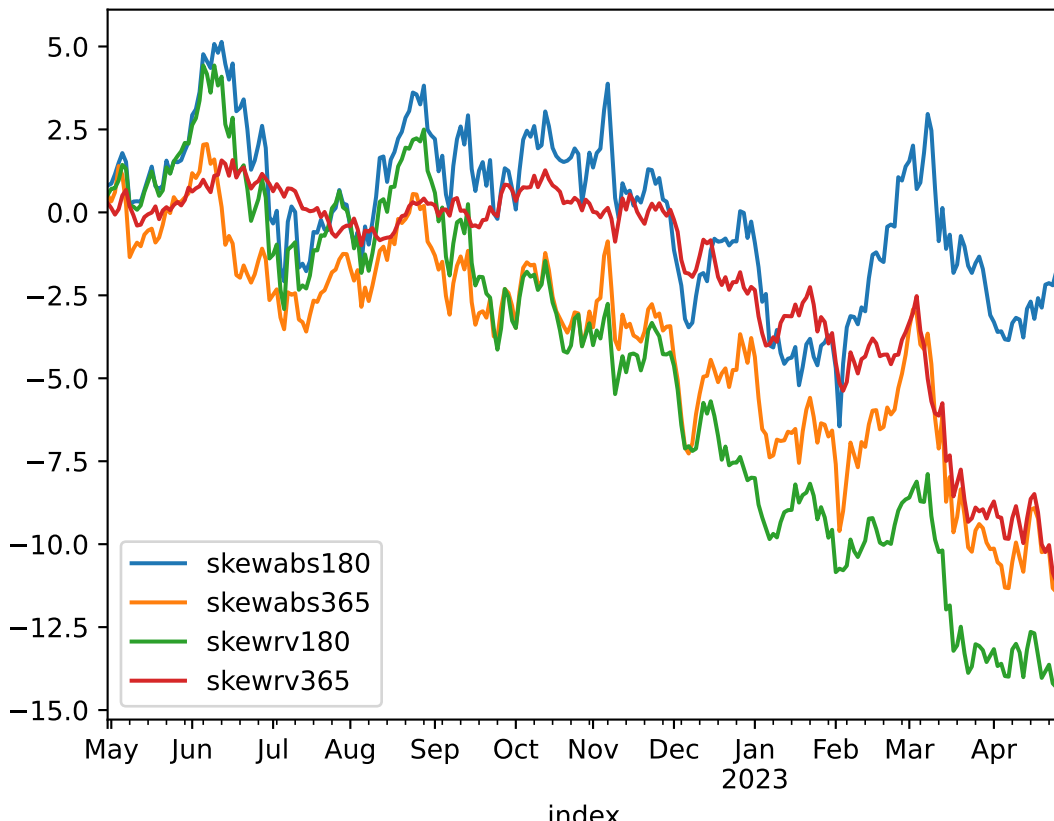


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -1.306, 'skewabs365': -10.625, 'skewrv180': -13.856, 'skewrv365': -10.662}

ann. std {'skewabs180': 11.058, 'skewabs365': 9.977, 'skewrv180': 9.304, 'skewrv365': 5.782}

ann. SR {'skewabs180': -0.12, 'skewabs365': -1.06, 'skewrv180': -1.49, 'skewrv365': -1.84}

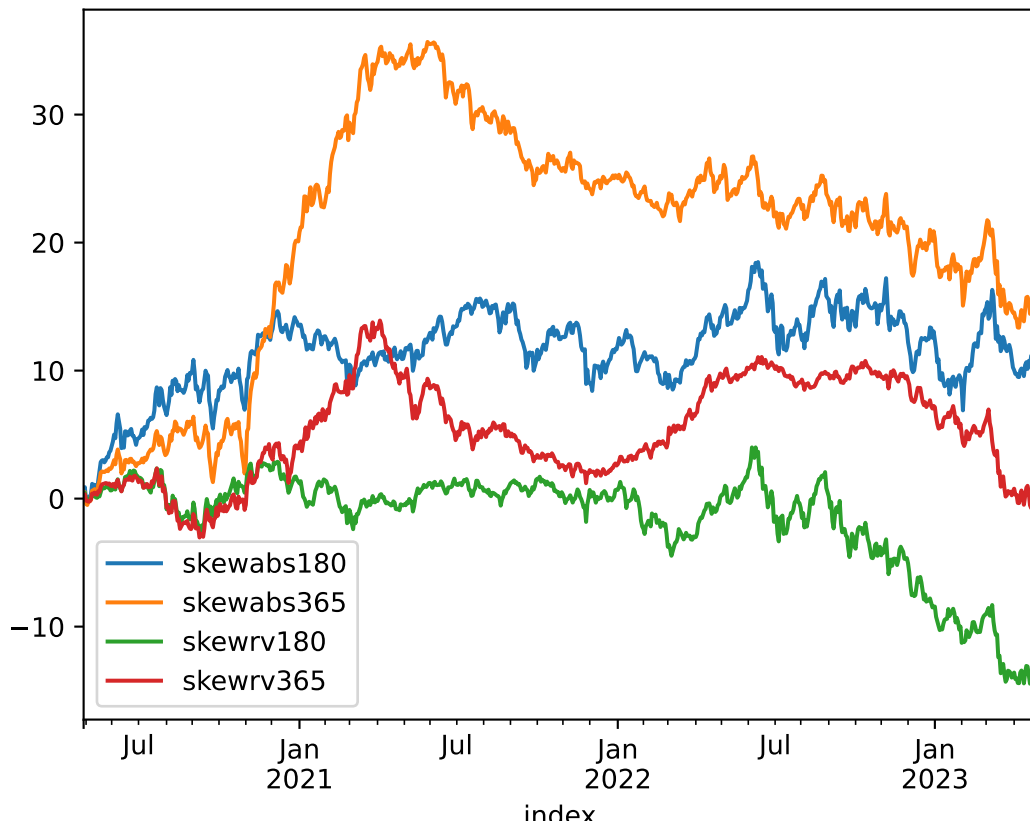


Total Trading Rule P&L for period '3Y'

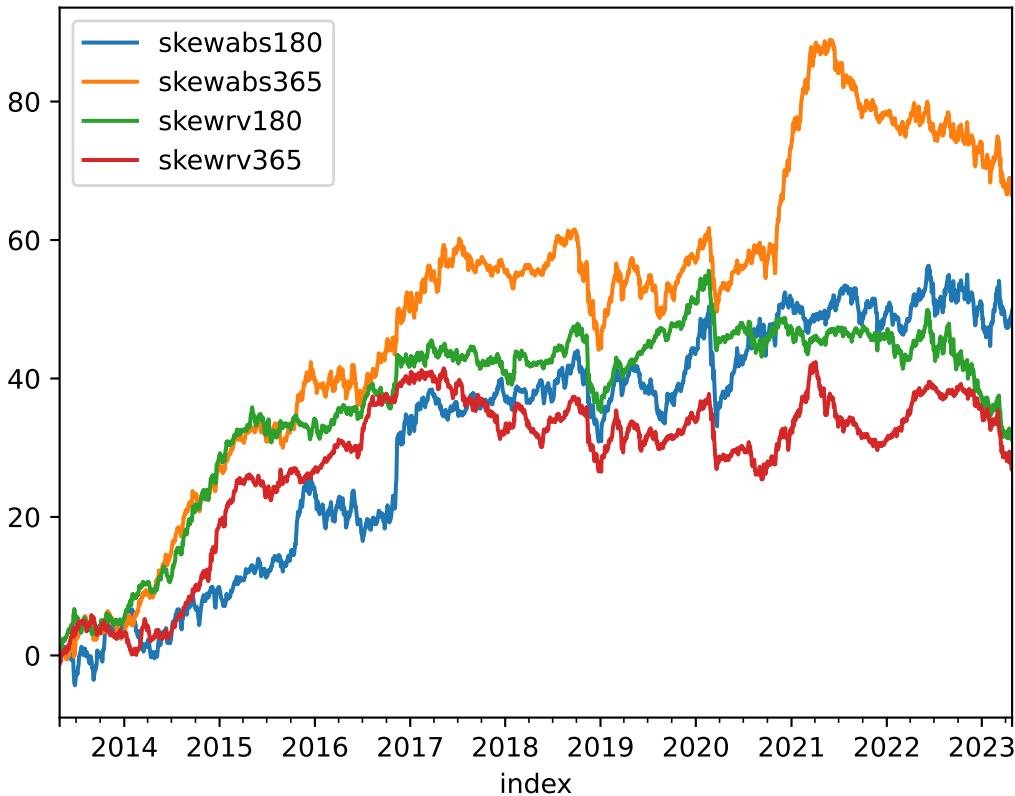
ann. mean {'skewabs180': 3.933, 'skewabs365': 4.546, 'skewrv180': -4.747, 'skewrv365': -0.439}

ann. std {'skewabs180': 9.139, 'skewabs365': 8.934, 'skewrv180': 7.247, 'skewrv365': 6.353}

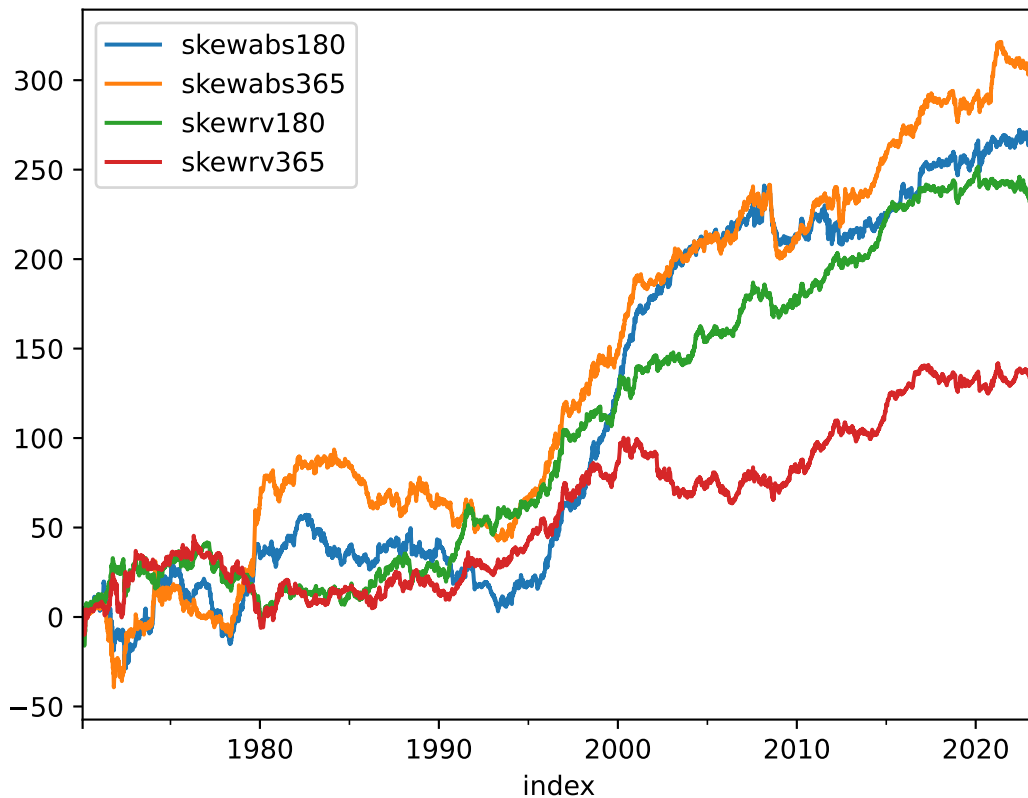
ann. SR {'skewabs180': 0.43, 'skewabs365': 0.51, 'skewrv180': -0.65, 'skewrv365': -0.07}



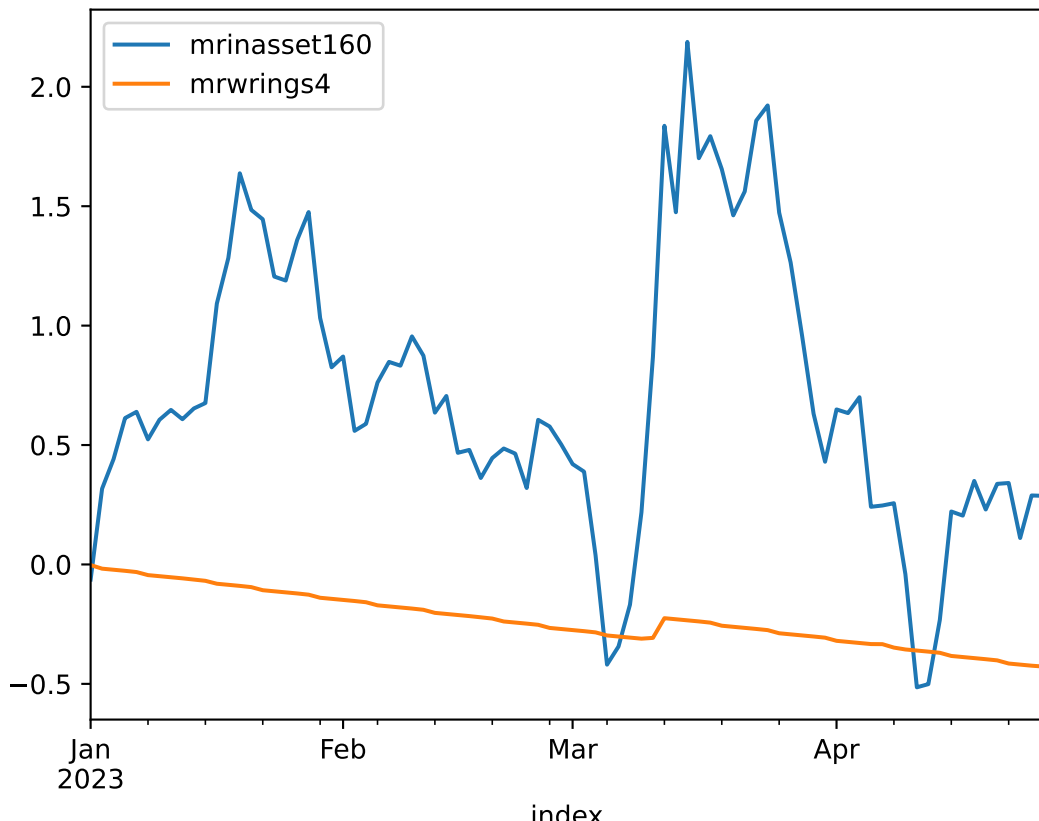
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.888, 'skewabs365': 6.585, 'skewrv180': 3.077, 'skewrv365': 2.661}
ann. std {'skewabs180': 8.011, 'skewabs365': 7.959, 'skewrv180': 6.394, 'skewrv365': 6.056}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.83, 'skewrv180': 0.48, 'skewrv365': 0.44}



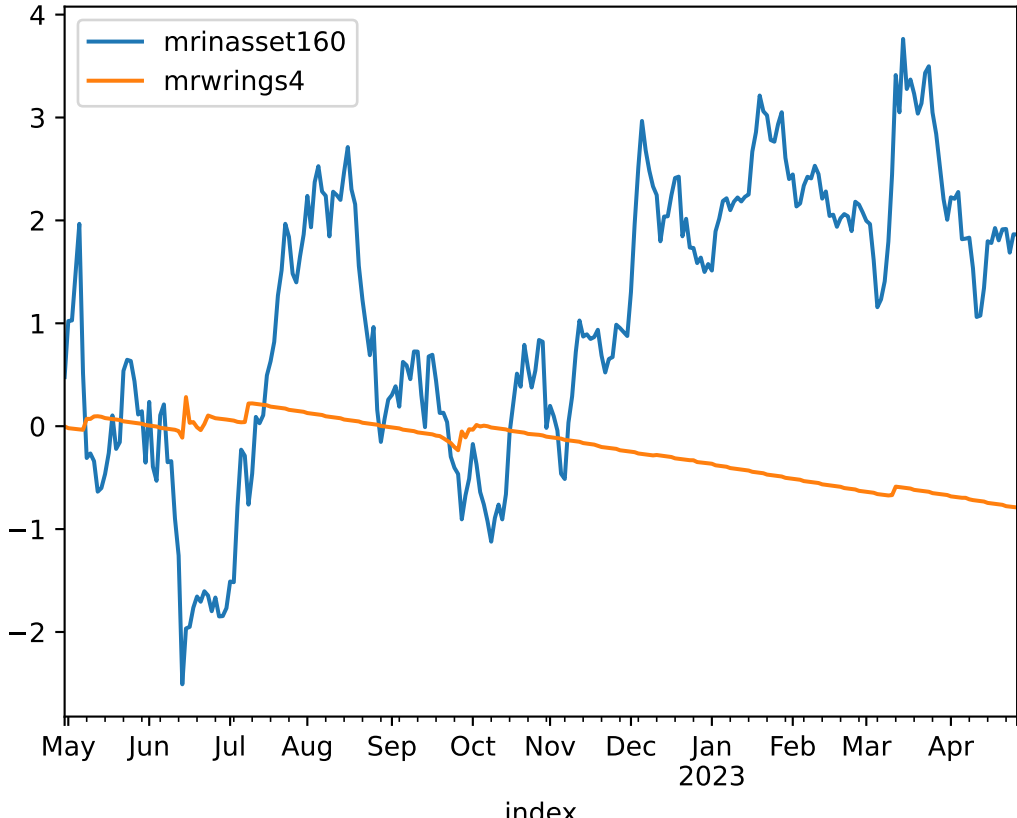
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.899, 'skewabs365': 5.522, 'skewrv180': 4.194, 'skewrv365': 2.332}
ann. std {'skewabs180': 10.1, 'skewabs365': 9.87, 'skewrv180': 8.751, 'skewrv365': 8.125}
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



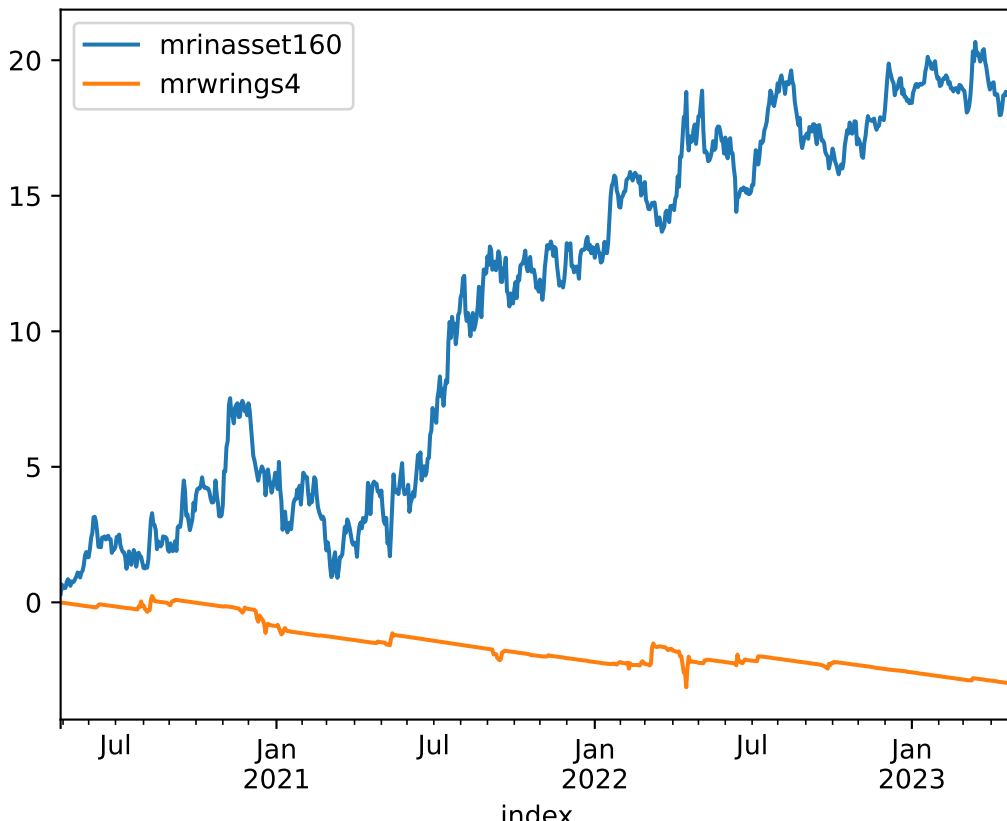
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.875, 'mrwrings4': -1.303}
ann. std {'mrinasset160': 4.204, 'mrwrings4': 0.165}
ann. SR {'mrinasset160': 0.21, 'mrwrings4': -7.89}



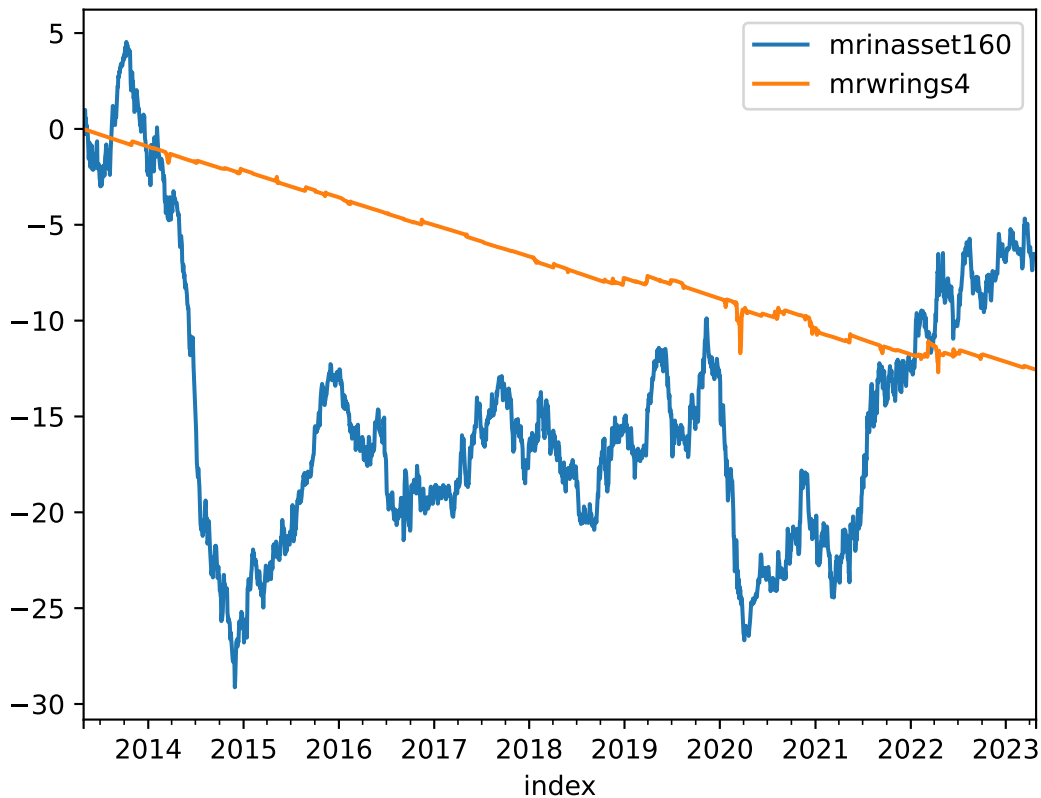
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 1.835, 'mrwrings4': -0.778}
ann. std {'mrinasset160': 5.15, 'mrwrings4': 0.585}
ann. SR {'mrinasset160': 0.36, 'mrwrings4': -1.33}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.146, 'mrwrings4': -0.983}
ann. std {'mrinasset160': 6.259, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 0.98, 'mrwrings4': -0.97}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.645, 'mrwrings4': -1.233}
ann. std {'mrinasset160': 6.212, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.1, 'mrwrings4': -1.4}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.559, 'mrwrings4': -2.147}
ann. std {'mrinasset160': 9.867, 'mrwrings4': 2.088}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

