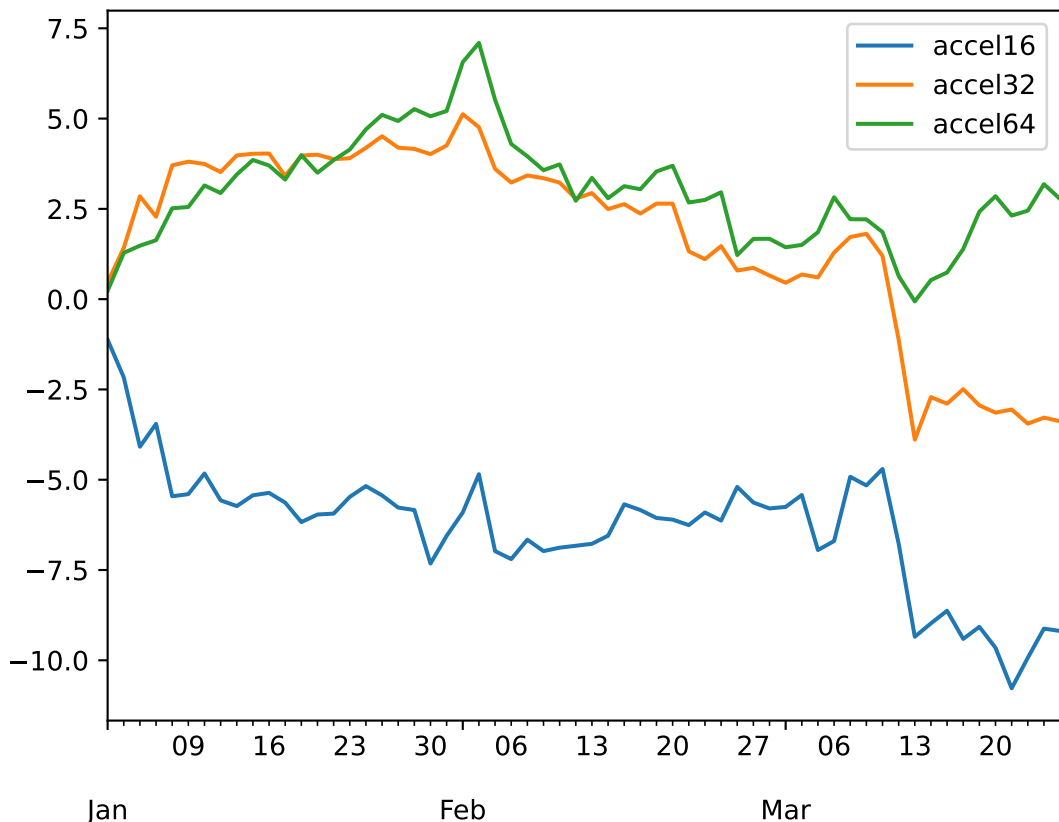
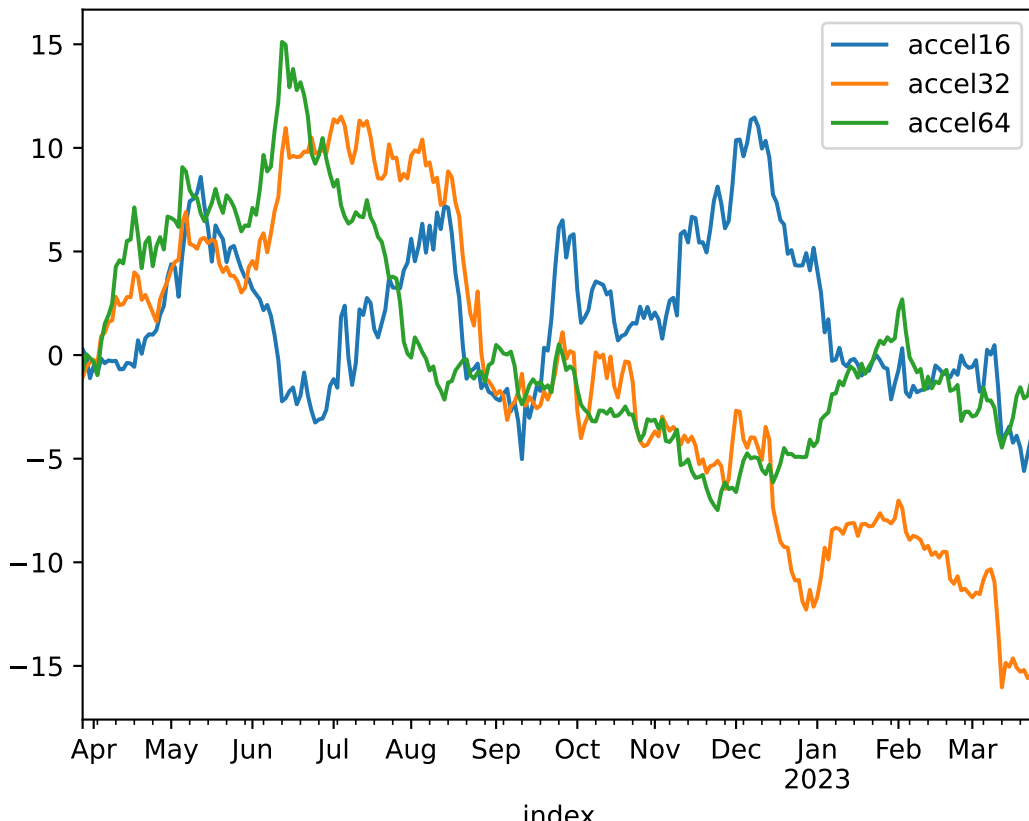


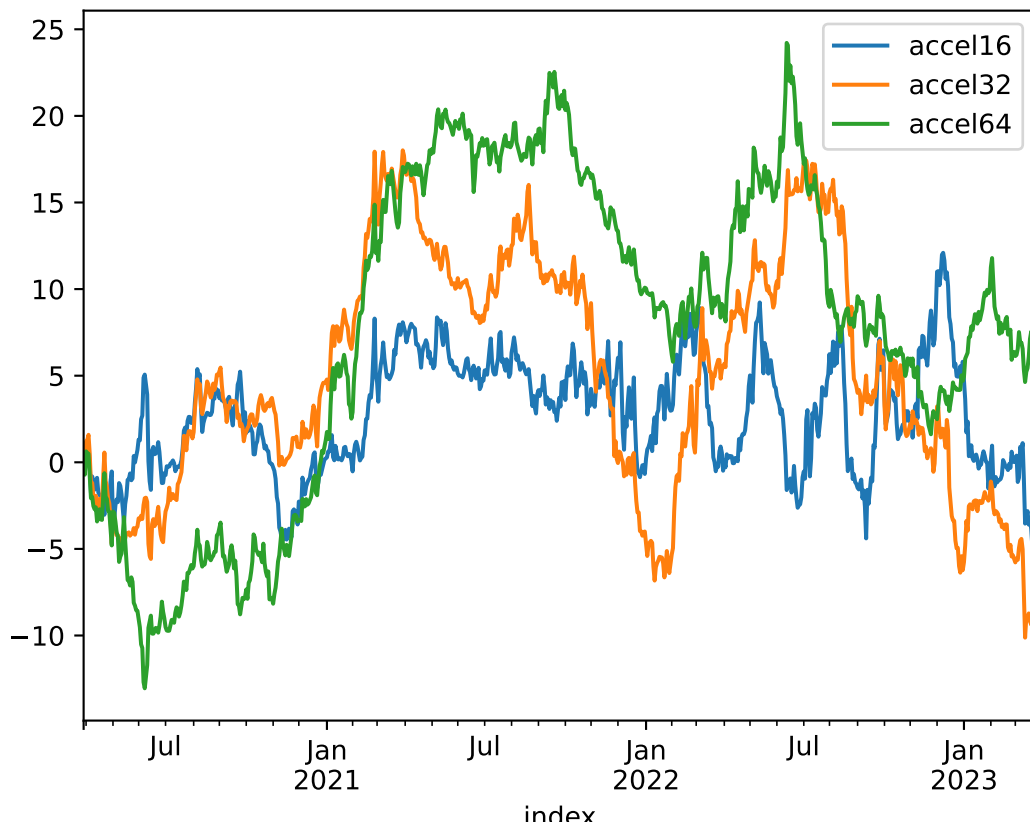
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -39.2, 'accel32': -14.419, 'accel64': 11.83}
ann. std {'accel16': 13.694, 'accel32': 11.085, 'accel64': 10.195}
ann. SR {'accel16': -2.86, 'accel32': -1.3, 'accel64': 1.16}



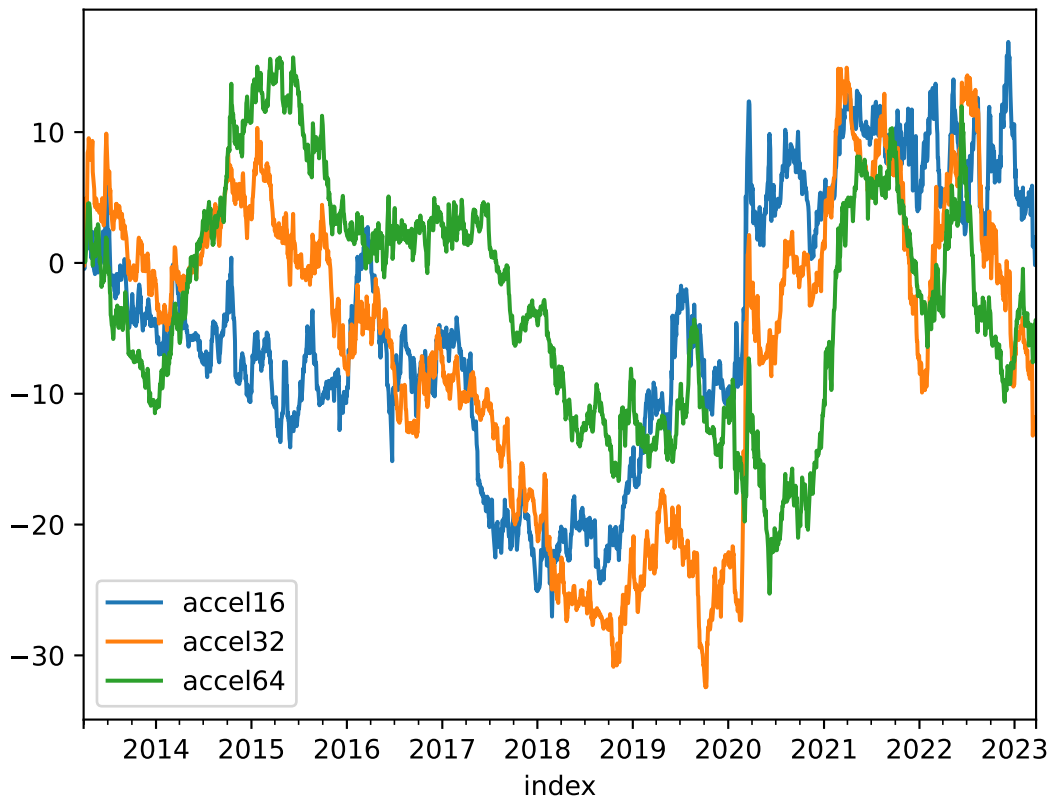
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -3.962, 'accel32': -15.343, 'accel64': -1.611}
ann. std {'accel16': 15.943, 'accel32': 13.269, 'accel64': 11.554}
ann. SR {'accel16': -0.25, 'accel32': -1.16, 'accel64': -0.14}



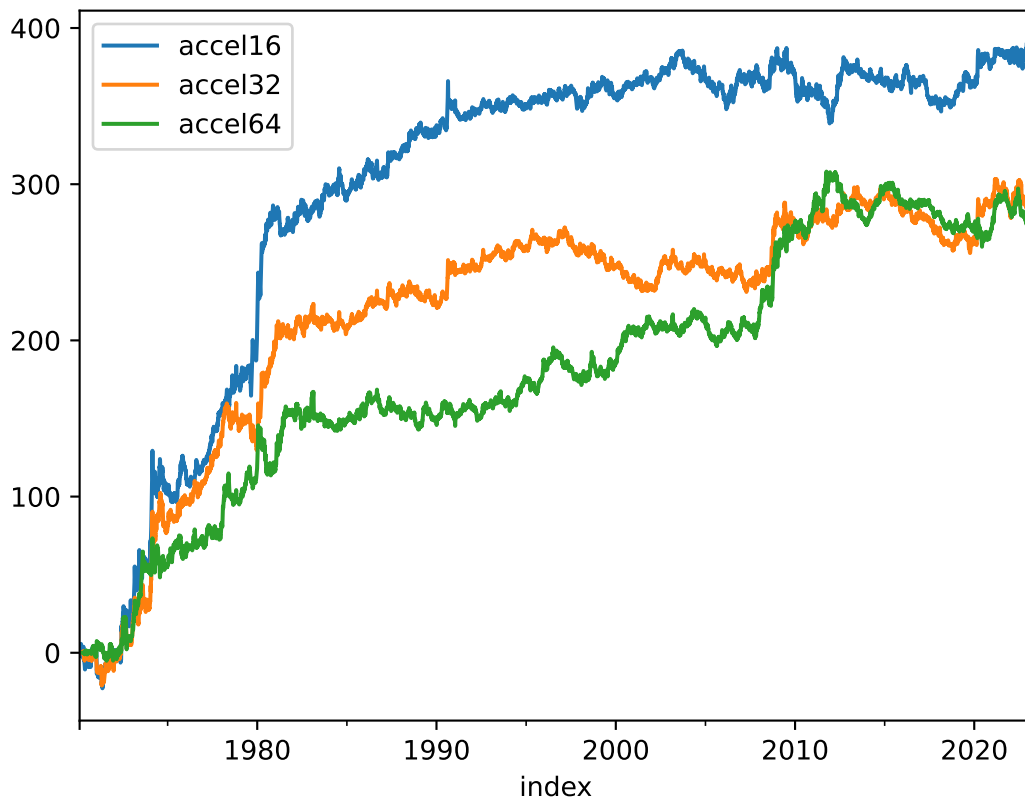
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -1.109, 'accel32': -3.155, 'accel64': 2.451}
ann. std {'accel16': 13.648, 'accel32': 11.965, 'accel64': 10.763}
ann. SR {'accel16': -0.08, 'accel32': -0.26, 'accel64': 0.23}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.14, 'accel32': -1.247, 'accel64': -0.468}
ann. std {'accel16': 11.706, 'accel32': 10.784, 'accel64': 9.349}
ann. SR {'accel16': 0.01, 'accel32': -0.12, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.924, 'accel32': 5.091, 'accel64': 5.179}
ann. std {'accel16': 14.134, 'accel32': 12.46, 'accel64': 12.11}
ann. SR {'accel16': 0.49, 'accel32': 0.41, 'accel64': 0.43}

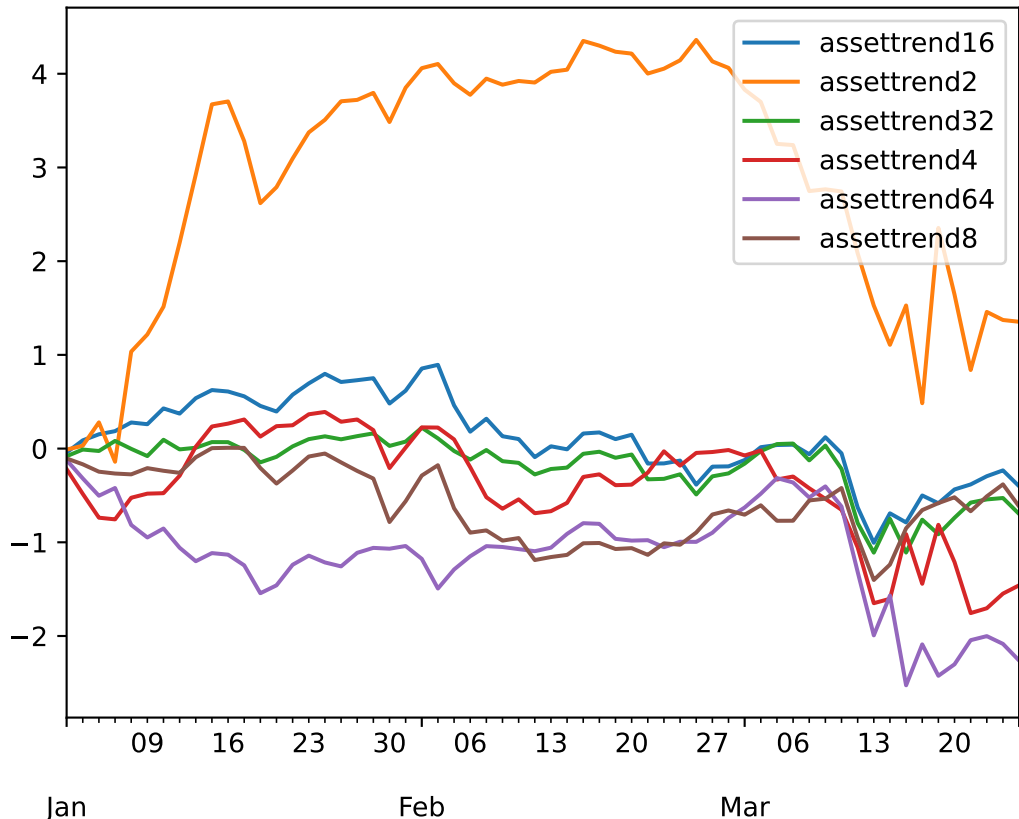


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -1.714, 'assetrend2': 5.774, 'assetrend32': -2.975, 'assetrend4': -6.226, 'assetrend64': -9.65, 'assetrend8': -2.633}

ann. std {'assetrend16': 2.771, 'assetrend2': 7.377, 'assetrend32': 2.565, 'assetrend4': 3.893, 'assetrend64': 3.828, 'assetrend8': 2.889}

ann. SR {'assetrend16': -0.62, 'assetrend2': 0.78, 'assetrend32': -1.16, 'assetrend4': -1.6, 'assetrend64': -2.52, 'assetrend8': -0.91}

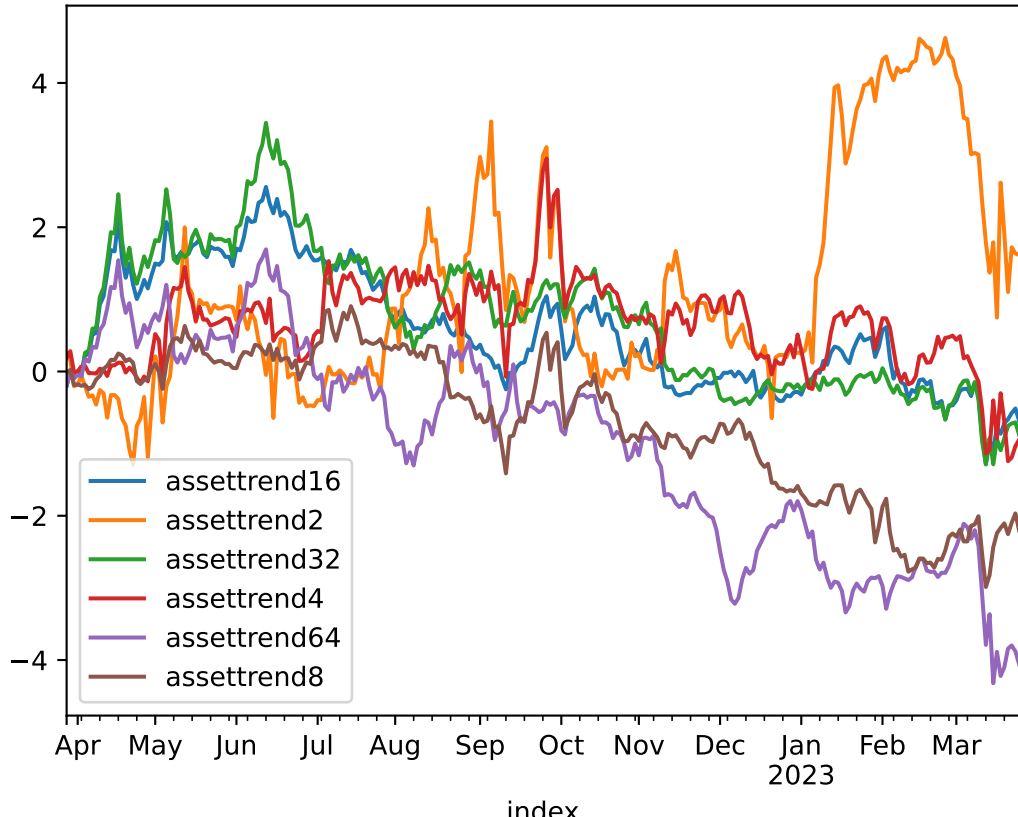


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -0.674, 'assettrend2': 1.598, 'assettrend32': -0.865, 'assettrend4': -0.936, 'assettrend64': -4.011, 'assettrend8': -2.177}

ann. std {'assettrend16': 2.533, 'assettrend2': 6.405, 'assettrend32': 2.932, 'assettrend4': 3.935, 'assettrend64': 3.295, 'assettrend8': 2.553}

ann. SR {'assettrend16': -0.27, 'assettrend2': 0.25, 'assettrend32': -0.29, 'assettrend4': -0.24, 'assettrend64': -1.22, 'assettrend8': -0.85}

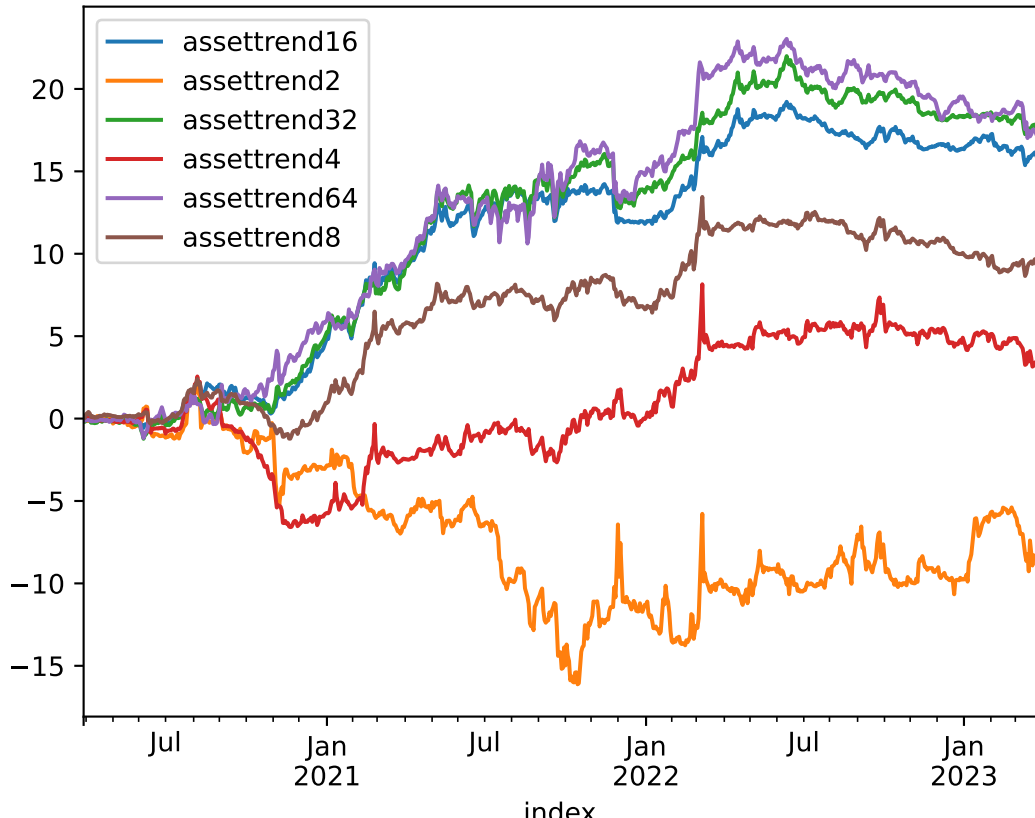


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.244, 'assettrend2': -2.756, 'assettrend32': 5.799, 'assettrend4': 1.132, 'assettrend64': 5.673, 'assettrend8': 3.097}

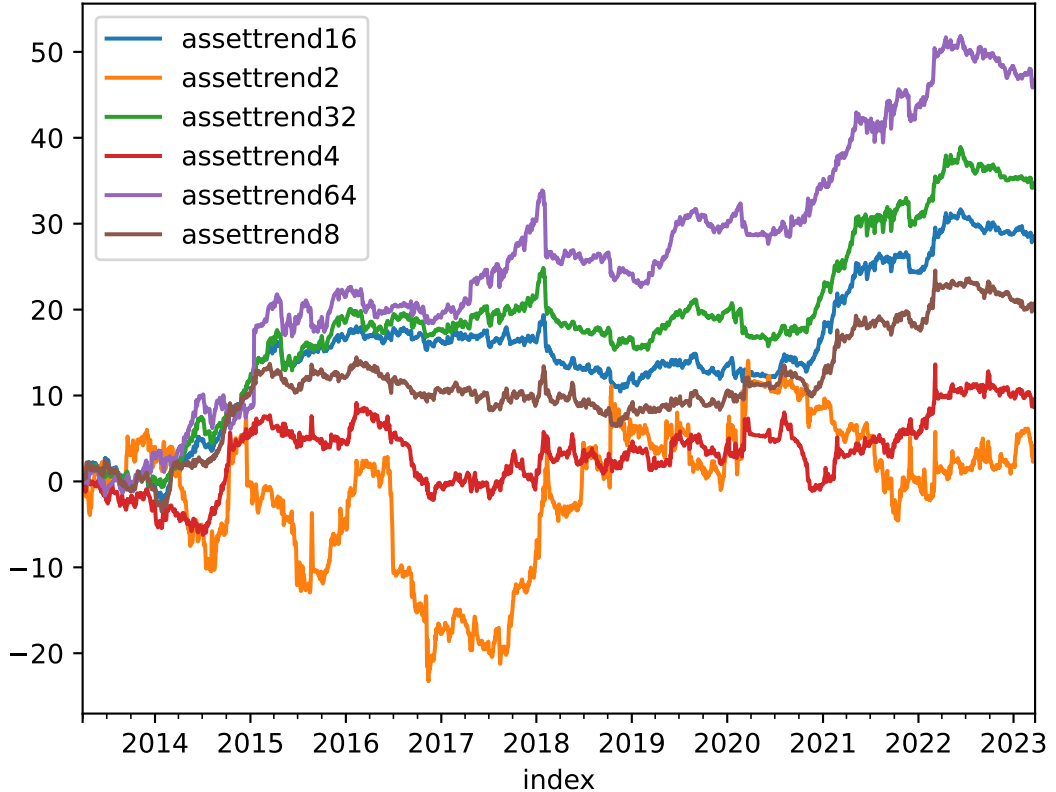
ann. std {'assettrend16': 3.404, 'assettrend2': 7.782, 'assettrend32': 4.124, 'assettrend4': 4.926, 'assettrend64': 4.998, 'assettrend8': 3.49}

ann. SR {'assettrend16': 1.54, 'assettrend2': -0.35, 'assettrend32': 1.41, 'assettrend4': 0.23, 'assettrend64': 1.13, 'assettrend8': 0.89}



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

ann. mean {'assettrend16': 2.794, 'assettrend2': 0.309, 'assettrend32': 3.4, 'assettrend4': 0.877, 'assettrend64': 4.529, 'assettrend8': 2.018}
ann. std {'assettrend16': 3.166, 'assettrend2': 9.816, 'assettrend32': 3.599, 'assettrend4': 4.995, 'assettrend64': 5.201, 'assettrend8': 3.472}
ann. SR {'assettrend16': 0.88, 'assettrend2': 0.03, 'assettrend32': 0.94, 'assettrend4': 0.18, 'assettrend64': 0.87, 'assettrend8': 0.58}

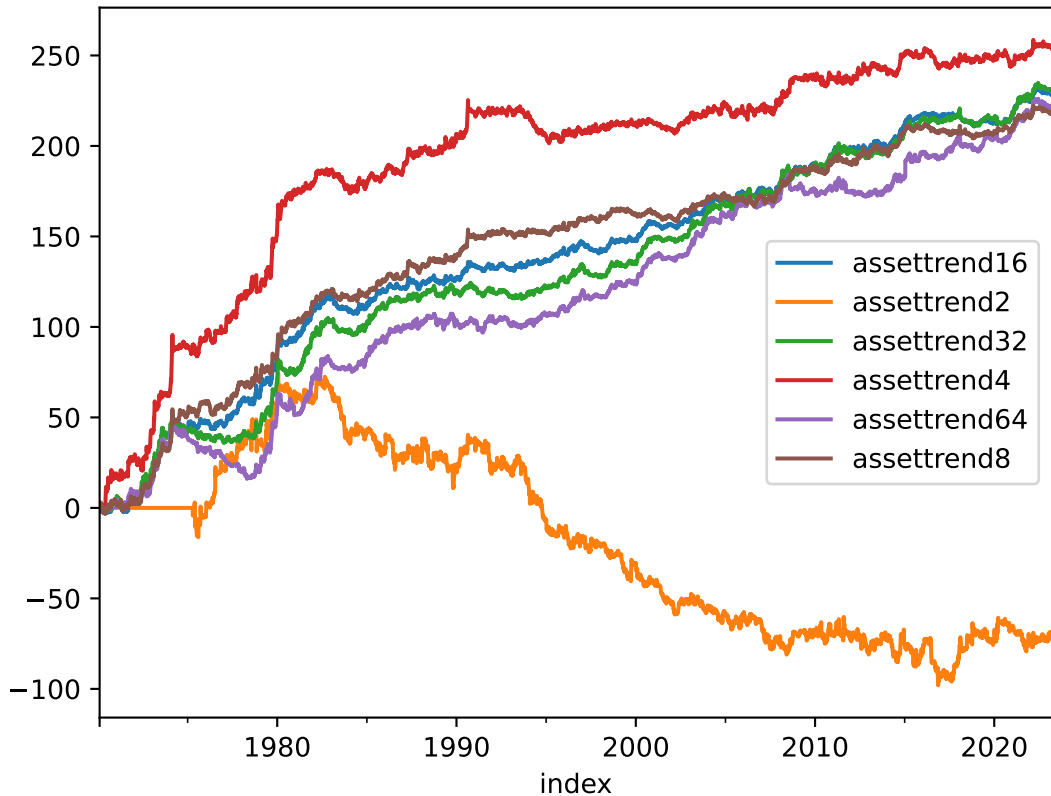


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.222, 'assettrend2': -1.322, 'assettrend32': 4.256, 'assettrend4': 4.688, 'assettrend64': 4.068, 'assettrend8': 4.031}

ann. std {'assettrend16': 4.306, 'assettrend2': 10.266, 'assettrend32': 4.498, 'assettrend4': 6.551, 'assettrend64': 4.998, 'assettrend8': 4.635}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.95, 'assettrend4': 0.72, 'assettrend64': 0.81, 'assettrend8': 0.87}

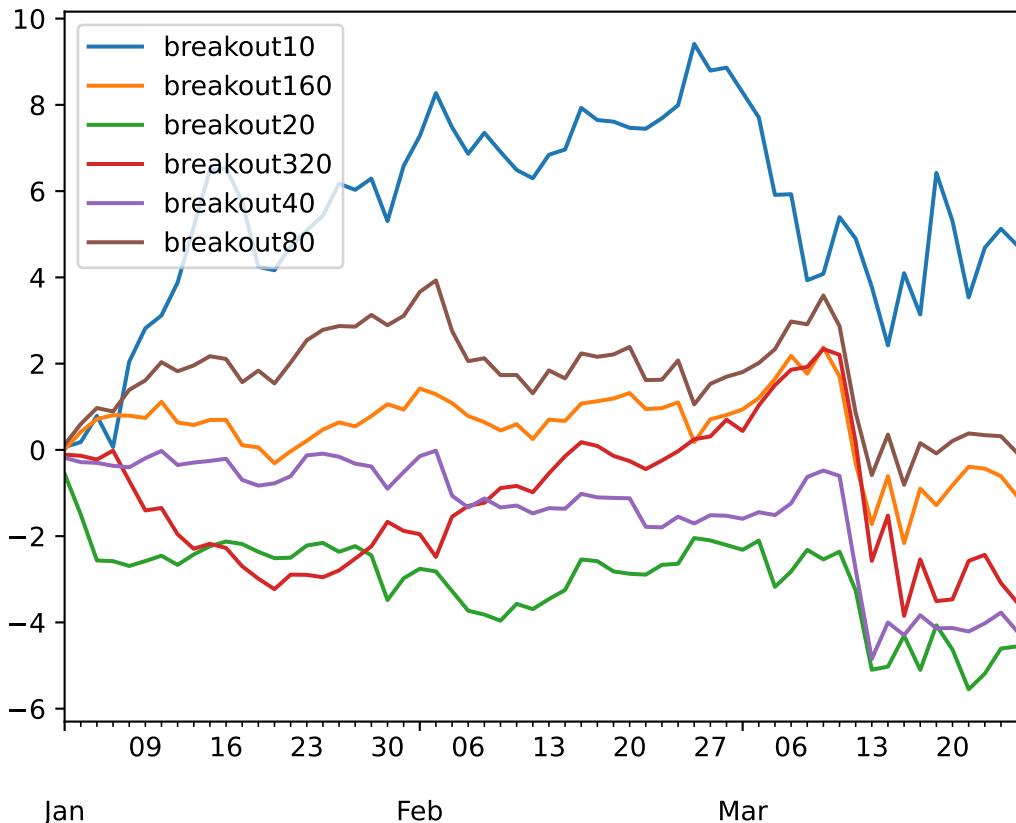


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 20.249, 'breakout160': -4.572, 'breakout20': -19.44, 'breakout320': -15.071, 'breakout40': -17.942, 'breakout80': -0.291}

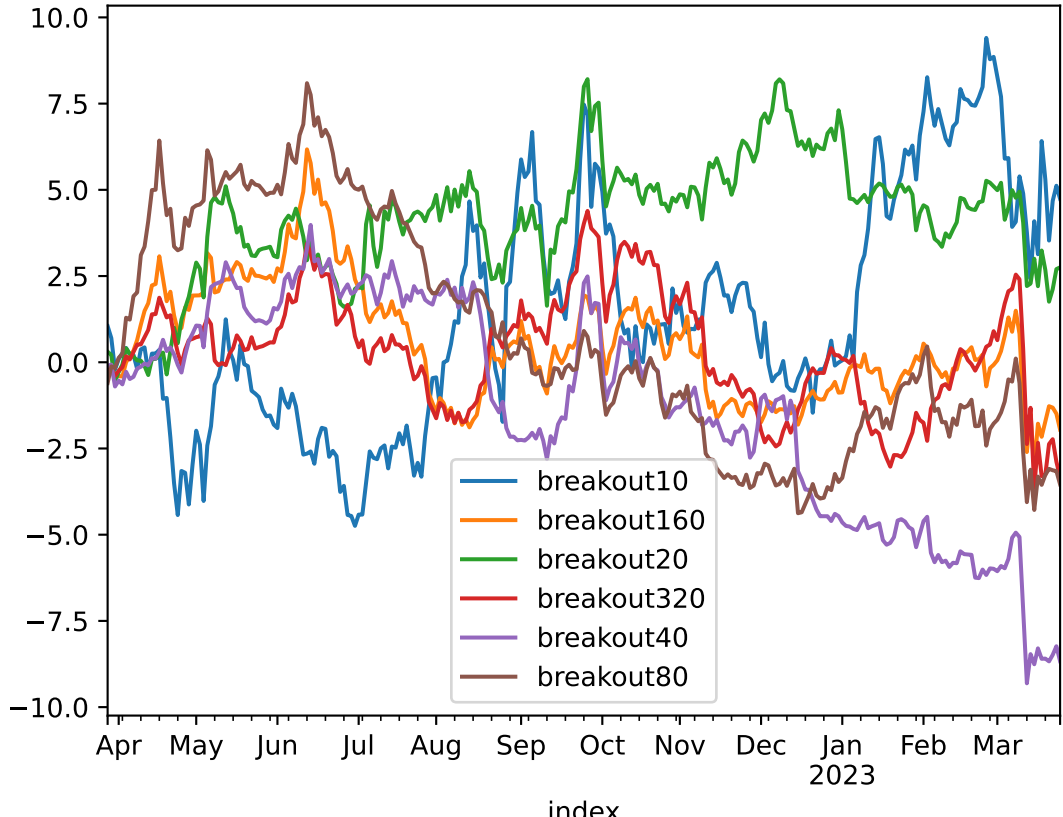
ann. std {'breakout10': 15.638, 'breakout160': 8.694, 'breakout20': 8.13, 'breakout320': 10.982, 'breakout40': 7.791, 'breakout80': 9.006}

ann. SR {'breakout10': 1.29, 'breakout160': -0.53, 'breakout20': -2.39, 'breakout320': -1.37, 'breakout40': -2.3, 'breakout80': -0.03}



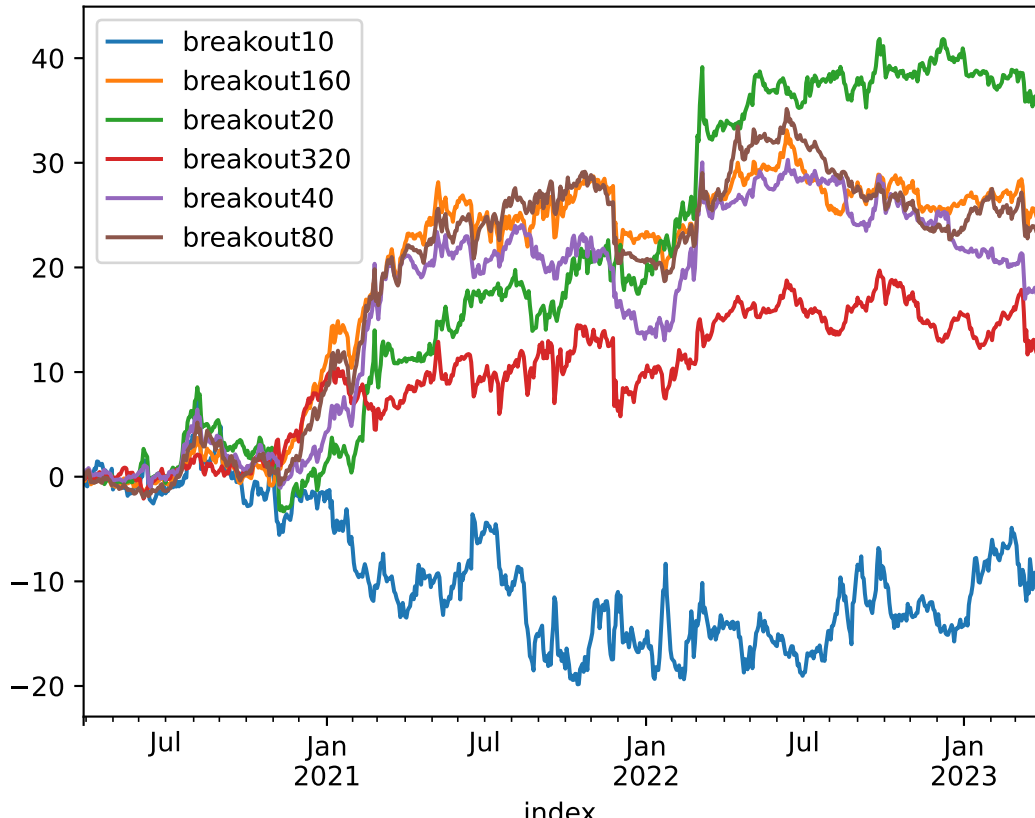
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 4.683, 'breakout160': -1.93, 'breakout20': 2.719, 'breakout320': -3.291, 'breakout40': -8.567, 'breakout80': -3.5}
ann. std {'breakout10': 13.618, 'breakout160': 7.118, 'breakout20': 8.581, 'breakout320': 7.561, 'breakout40': 7.117, 'breakout80': 7.455}
ann. SR {'breakout10': 0.34, 'breakout160': -0.27, 'breakout20': 0.32, 'breakout320': -0.44, 'breakout40': -1.2, 'breakout80': -0.47}



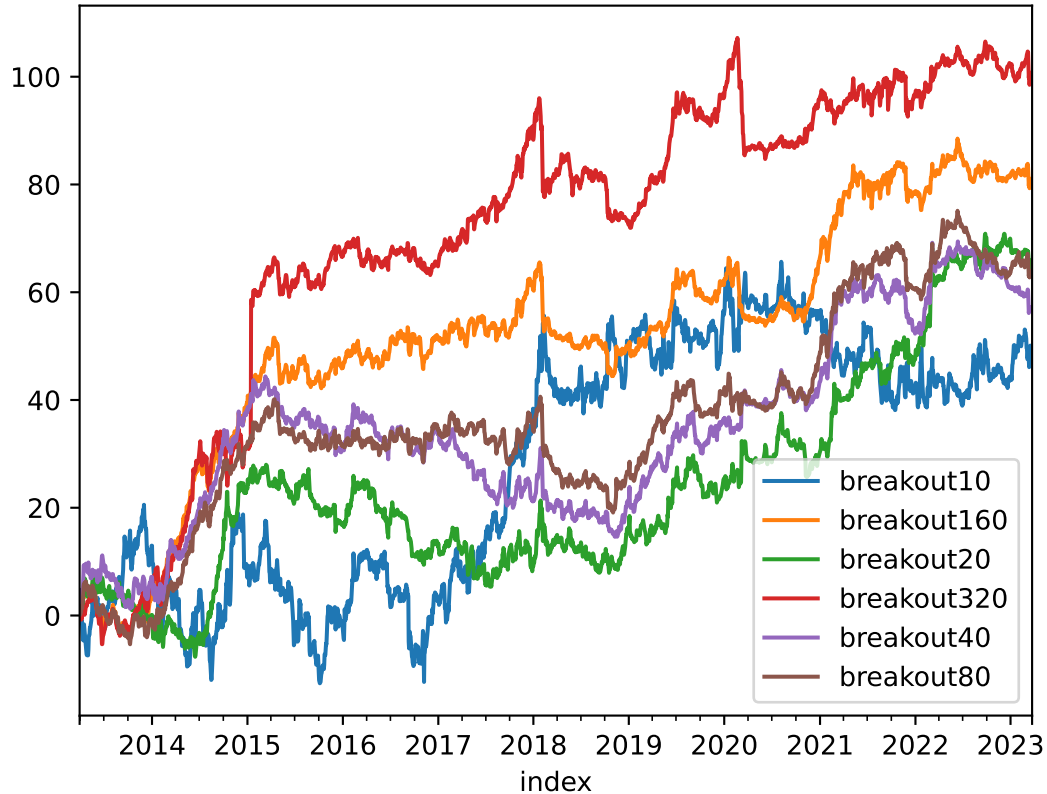
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.134, 'breakout160': 8.201, 'breakout20': 11.941, 'breakout320': 3.936, 'breakout40': 5.788, 'breakout80': 7.717}
ann. std {'breakout10': 15.054, 'breakout160': 9.169, 'breakout20': 10.998, 'breakout320': 9.893, 'breakout40': 9.443, 'breakout80': 8.919}
ann. SR {'breakout10': -0.21, 'breakout160': 0.89, 'breakout20': 1.09, 'breakout320': 0.4, 'breakout40': 0.61, 'breakout80': 0.87}



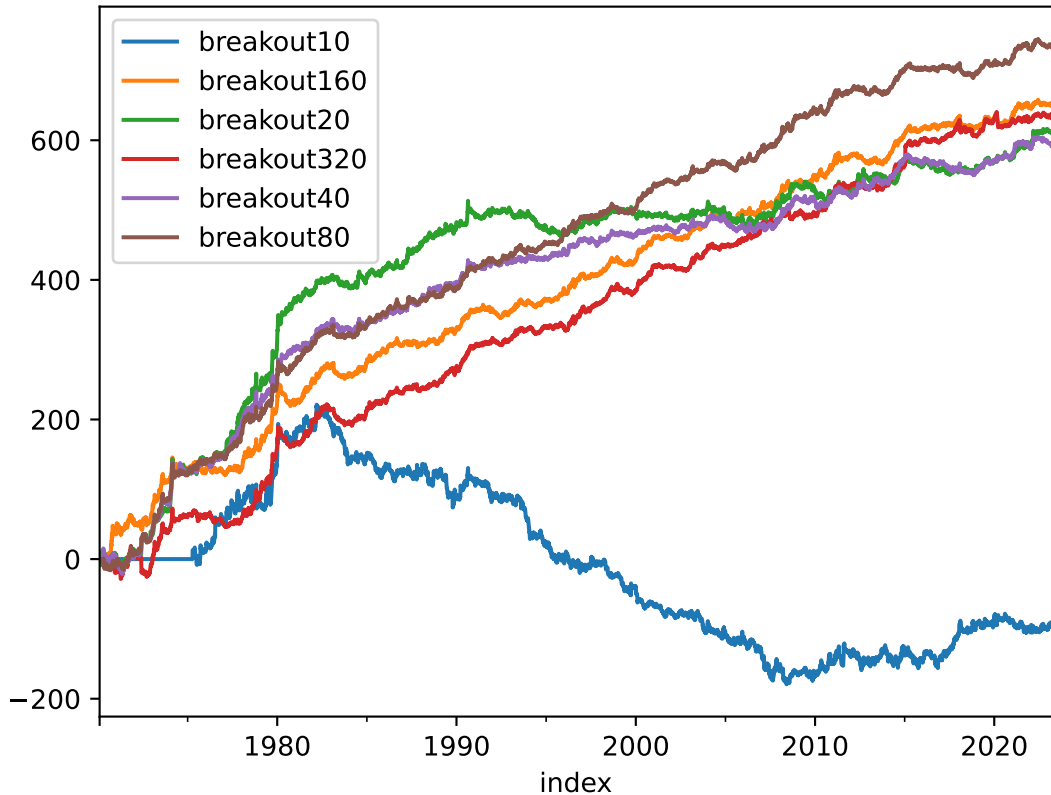
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.757, 'breakout160': 7.897, 'breakout20': 6.425, 'breakout320': 9.707, 'breakout40': 6.237, 'breakout80': 6.237}
ann. std {'breakout10': 17.896, 'breakout160': 8.889, 'breakout20': 11.138, 'breakout320': 13.101, 'breakout40': 9.481, 'breakout80': 8.772}
ann. SR {'breakout10': 0.27, 'breakout160': 0.89, 'breakout20': 0.58, 'breakout320': 0.74, 'breakout40': 0.59, 'breakout80': 0.71}



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

ann. mean {'breakout10': -1.762, 'breakout160': 12.002, 'breakout20': 11.279, 'breakout320': 11.67, 'breakout40': 10.934, 'breakout80': 13.545}
 ann. std {'breakout10': 21.333, 'breakout160': 11.536, 'breakout20': 14.899, 'breakout320': 12.123, 'breakout40': 12.118, 'breakout80': 11.725}
 ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.76, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.16}

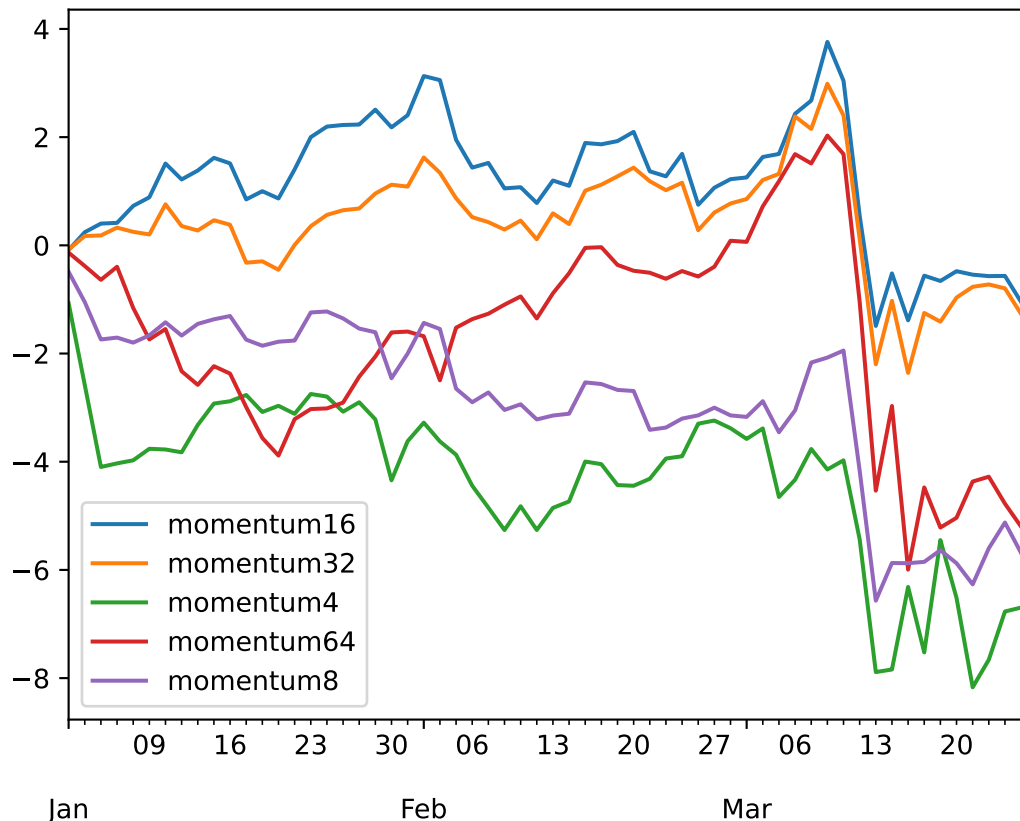


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -4.469, 'momentum32': -5.418, 'momentum4': -28.569, 'momentum64': -22.19, 'momentum8': -24.267}

ann. std {'momentum16': 9.902, 'momentum32': 9.78, 'momentum4': 12.142, 'momentum64': 13.598, 'momentum8': 9.026}

ann. SR {'momentum16': -0.45, 'momentum32': -0.55, 'momentum4': -2.35, 'momentum64': -1.63, 'momentum8': -2.69}

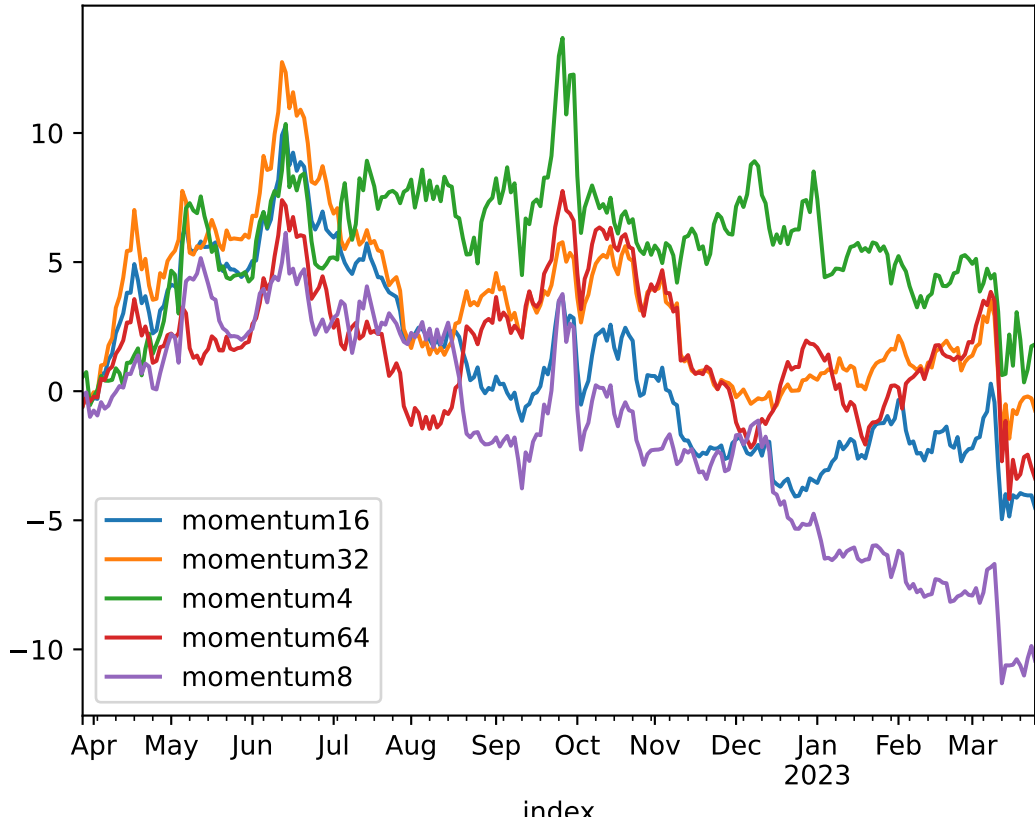


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -4.463, 'momentum32': -0.74, 'momentum4': 1.793, 'momentum64': -3.343, 'momentum8': -10.313}

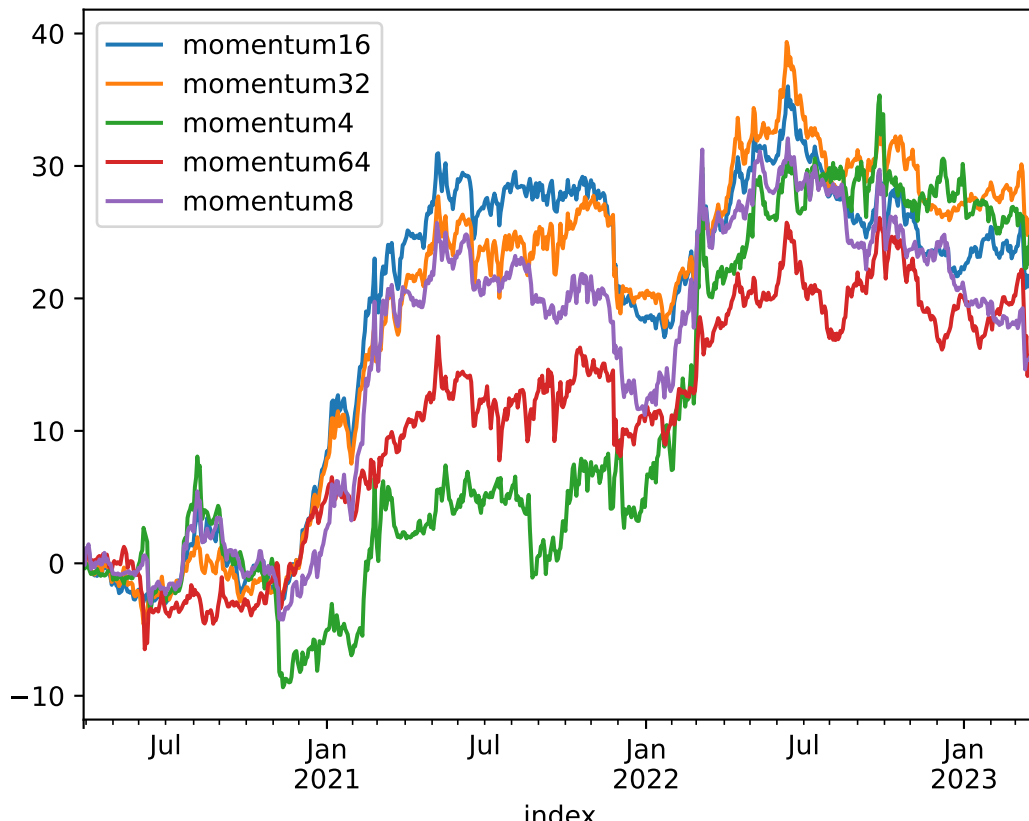
ann. std {'momentum16': 9.141, 'momentum32': 9.804, 'momentum4': 13.613, 'momentum64': 10.441, 'momentum8': 9.963}

ann. SR {'momentum16': -0.49, 'momentum32': -0.08, 'momentum4': 0.13, 'momentum64': -0.32, 'momentum8': -1.04}



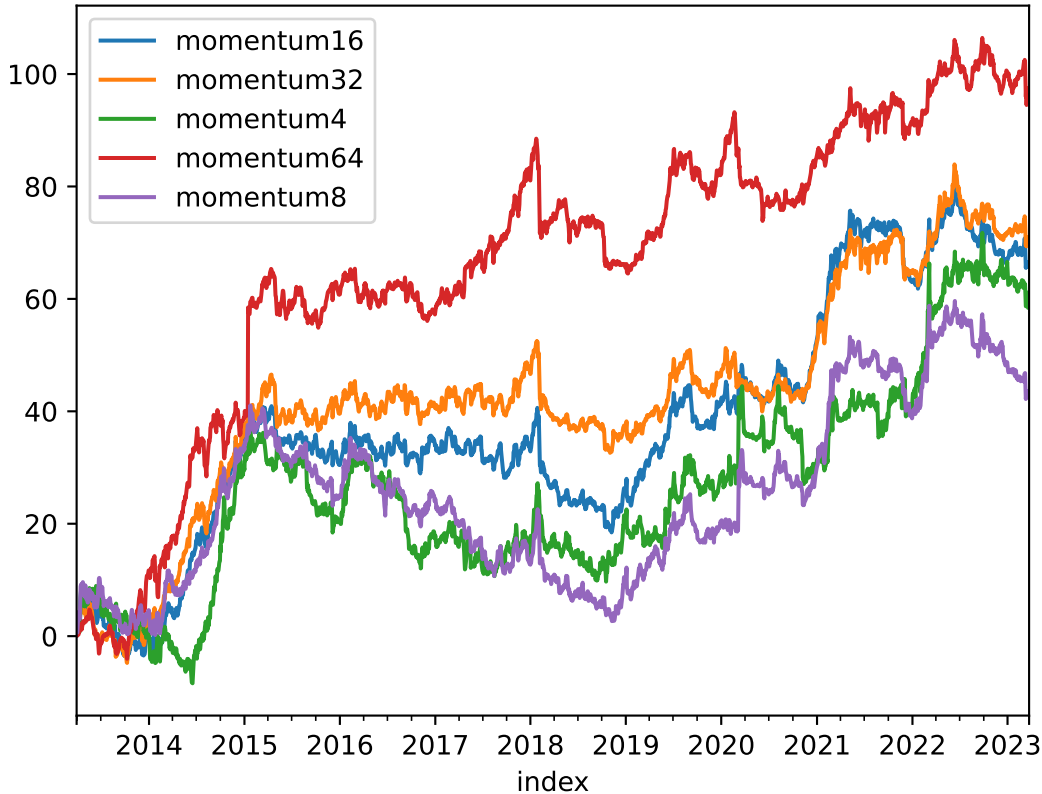
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 6.967, 'momentum32': 8.491, 'momentum4': 7.701, 'momentum64': 4.903, 'momentum8': 5.094}
ann. std {'momentum16': 10.194, 'momentum32': 10.415, 'momentum4': 14.591, 'momentum64': 10.826, 'momentum8': 11.417}
ann. SR {'momentum16': 0.68, 'momentum32': 0.82, 'momentum4': 0.53, 'momentum64': 0.45, 'momentum8': 0.45}



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

ann. mean {'momentum16': 6.48, 'momentum32': 6.919, 'momentum4': 5.882, 'momentum64': 9.361, 'momentum8': 4.231}
ann. std {'momentum16': 9.723, 'momentum32': 9.292, 'momentum4': 13.748, 'momentum64': 11.879, 'momentum8': 10.94}
ann. SR {'momentum16': 0.67, 'momentum32': 0.74, 'momentum4': 0.43, 'momentum64': 0.79, 'momentum8': 0.39}

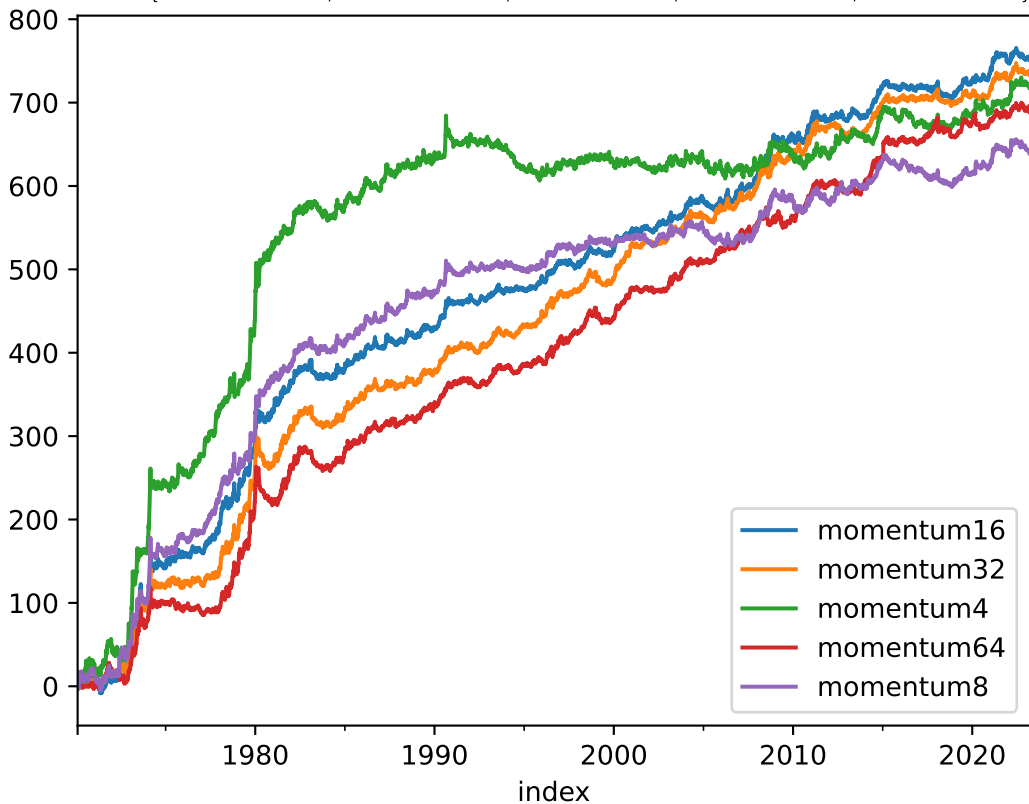


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.864, 'momentum32': 13.553, 'momentum4': 13.266, 'momentum64': 12.72, 'momentum8': 11.808}

ann. std {'momentum16': 13.055, 'momentum32': 12.618, 'momentum4': 17.904, 'momentum64': 12.339, 'momentum8': 14.338}

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

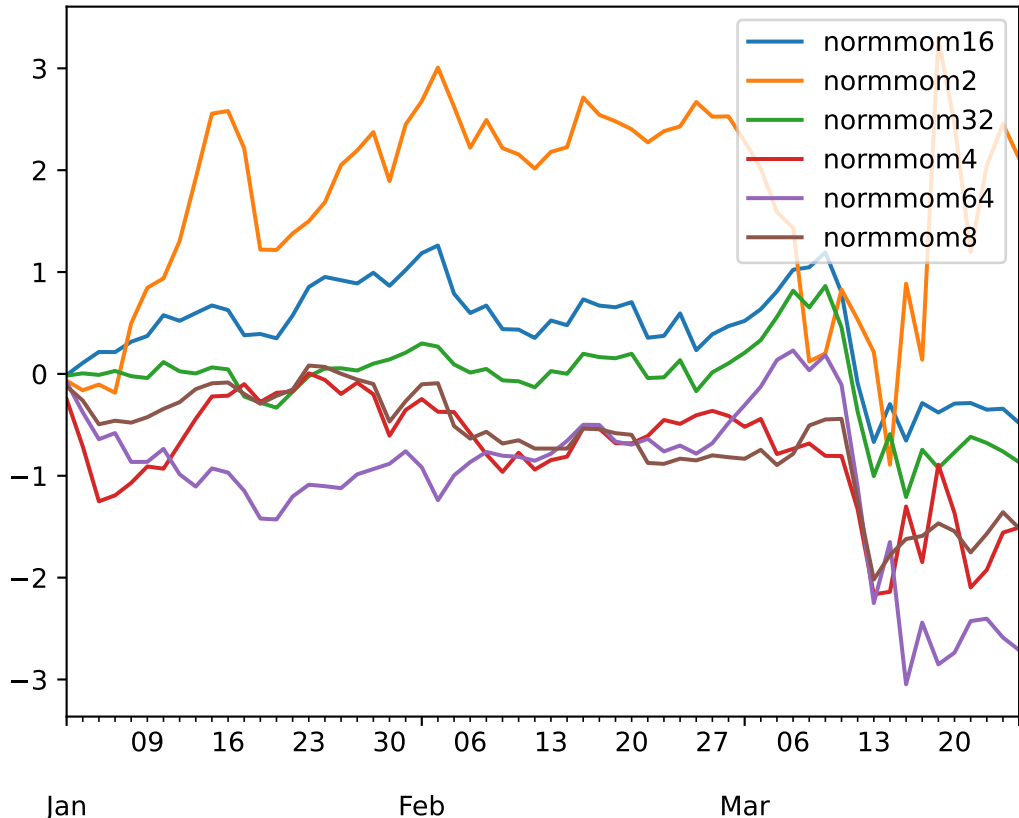


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -2.053, 'normmom2': 9.034, 'normmom32': -3.698, 'normmom4': -6.436, 'normmom64': -11.569, 'normmom8': -6.465}

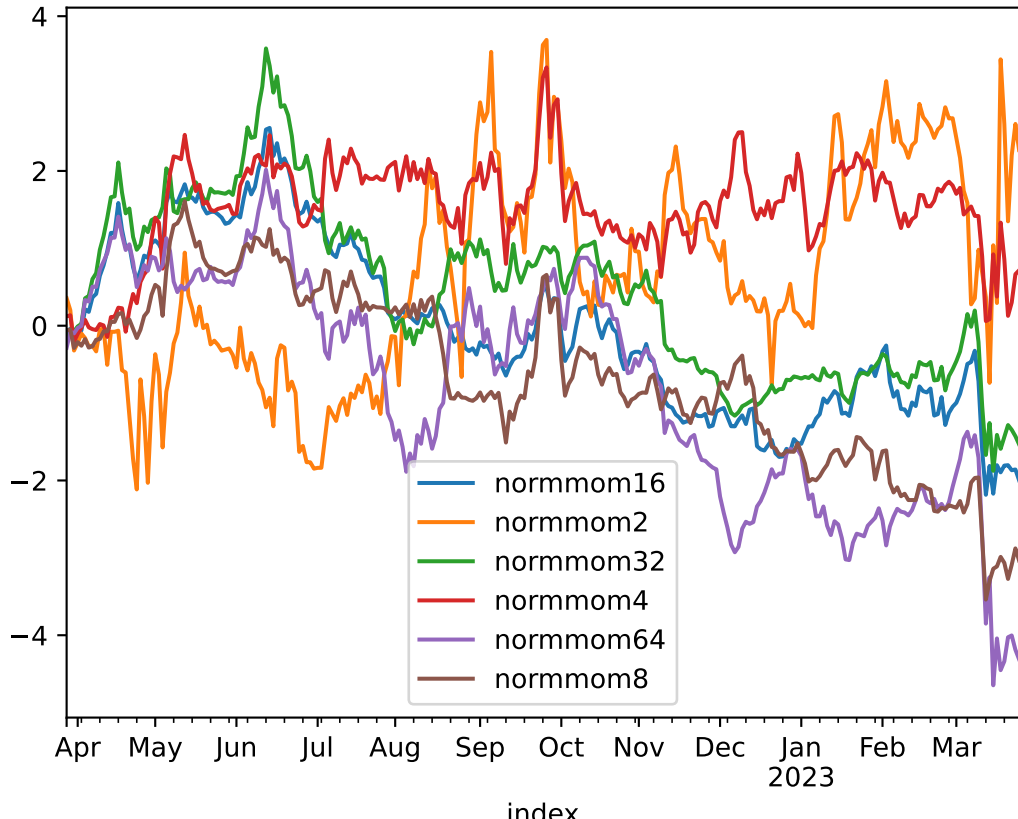
ann. std {'normmom16': 3.595, 'normmom2': 10.461, 'normmom32': 3.521, 'normmom4': 4.853, 'normmom64': 5.283, 'normmom8': 3.192}

ann. SR {'normmom16': -0.57, 'normmom2': 0.86, 'normmom32': -1.05, 'normmom4': -1.33, 'normmom64': -2.19, 'normmom8': -2.03}



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

ann. mean {'normmom16': -1.974, 'normmom2': 2.244, 'normmom32': -1.515, 'normmom4': 0.707, 'normmom64': -4.261, 'normmom8': -3.0}
ann. std {'normmom16': 2.736, 'normmom2': 7.859, 'normmom32': 3.068, 'normmom4': 4.327, 'normmom64': 3.892, 'normmom8': 2.911}
ann. SR {'normmom16': -0.72, 'normmom2': 0.29, 'normmom32': -0.49, 'normmom4': 0.16, 'normmom64': -1.09, 'normmom8': -1.03}

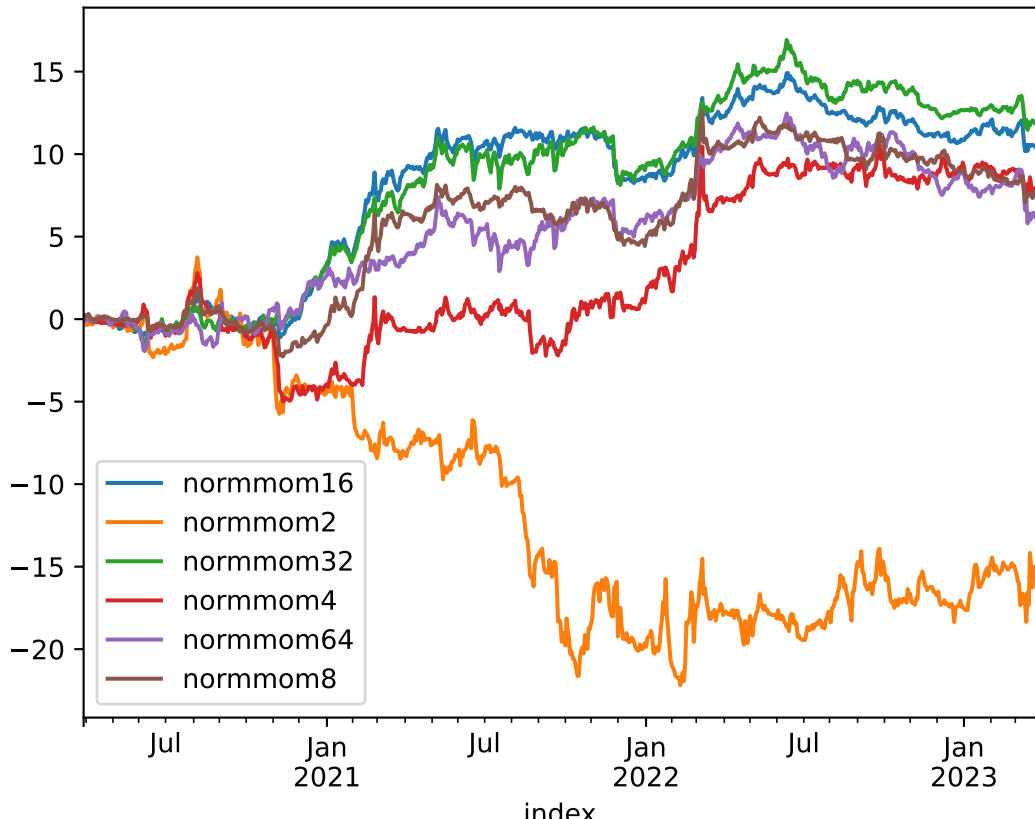


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.403, 'normmom2': -5.034, 'normmom32': 3.875, 'normmom4': 2.619, 'normmom64': 2.015, 'normmom8': 2.486}

ann. std {'normmom16': 3.515, 'normmom2': 8.611, 'normmom32': 3.884, 'normmom4': 5.342, 'normmom64': 4.276, 'normmom8': 3.907}

ann. SR {'normmom16': 0.97, 'normmom2': -0.58, 'normmom32': 1.0, 'normmom4': 0.49, 'normmom64': 0.47, 'normmom8': 0.64}

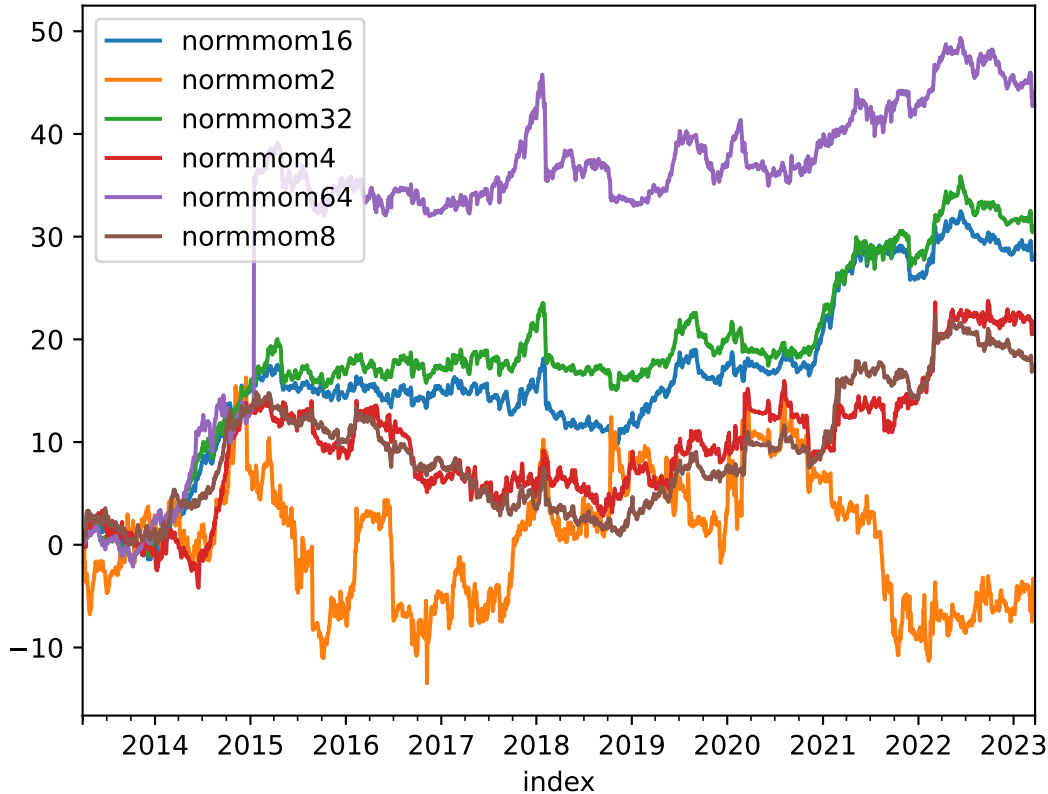


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.744, 'normmom2': -0.439, 'normmom32': 3.022, 'normmom4': 2.076, 'normmom64': 4.226, 'normmom8': 1.703}

ann. std {'normmom16': 3.494, 'normmom2': 10.37, 'normmom32': 3.634, 'normmom4': 5.47, 'normmom64': 8.275, 'normmom8': 3.914}

ann. SR {'normmom16': 0.79, 'normmom2': -0.04, 'normmom32': 0.83, 'normmom4': 0.38, 'normmom64': 0.51, 'normmom8': 0.44}

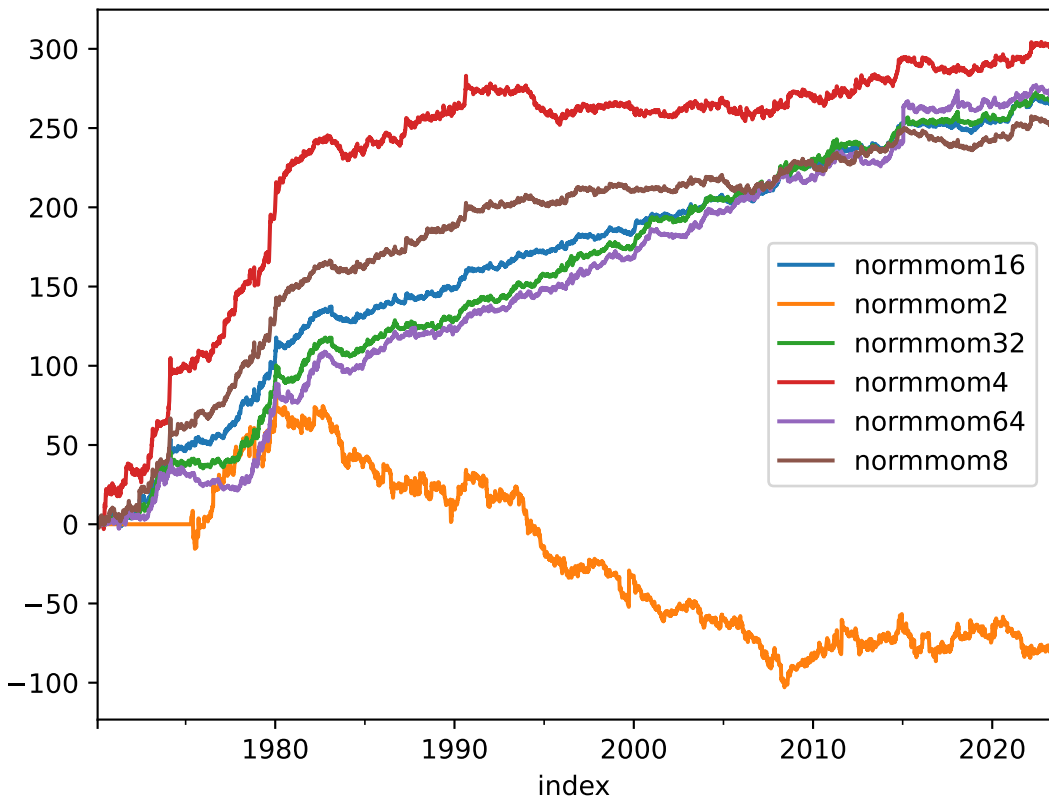


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.899, 'normmom2': -1.429, 'normmom32': 4.94, 'normmom4': 5.572, 'normmom64': 5.003, 'normmom8': 4.661}

ann. std {'normmom16': 4.535, 'normmom2': 11.619, 'normmom32': 4.613, 'normmom4': 7.388, 'normmom64': 5.874, 'normmom8': 5.368}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.87}

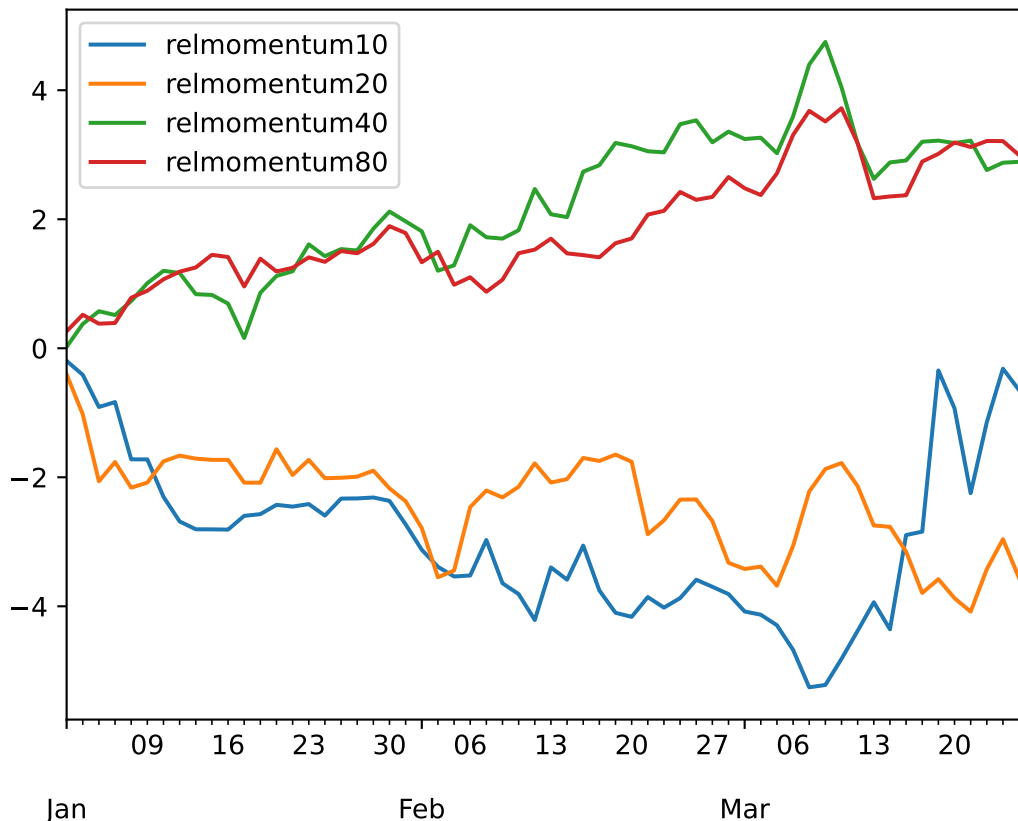


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -2.769, 'relmomentum20': -15.2, 'relmomentum40': 12.331, 'relmomentum80': 12.775}

ann. std {'relmomentum10': 9.015, 'relmomentum20': 6.688, 'relmomentum40': 5.542, 'relmomentum80': 4.28}

ann. SR {'relmomentum10': -0.31, 'relmomentum20': -2.27, 'relmomentum40': 2.23, 'relmomentum80': 2.98}

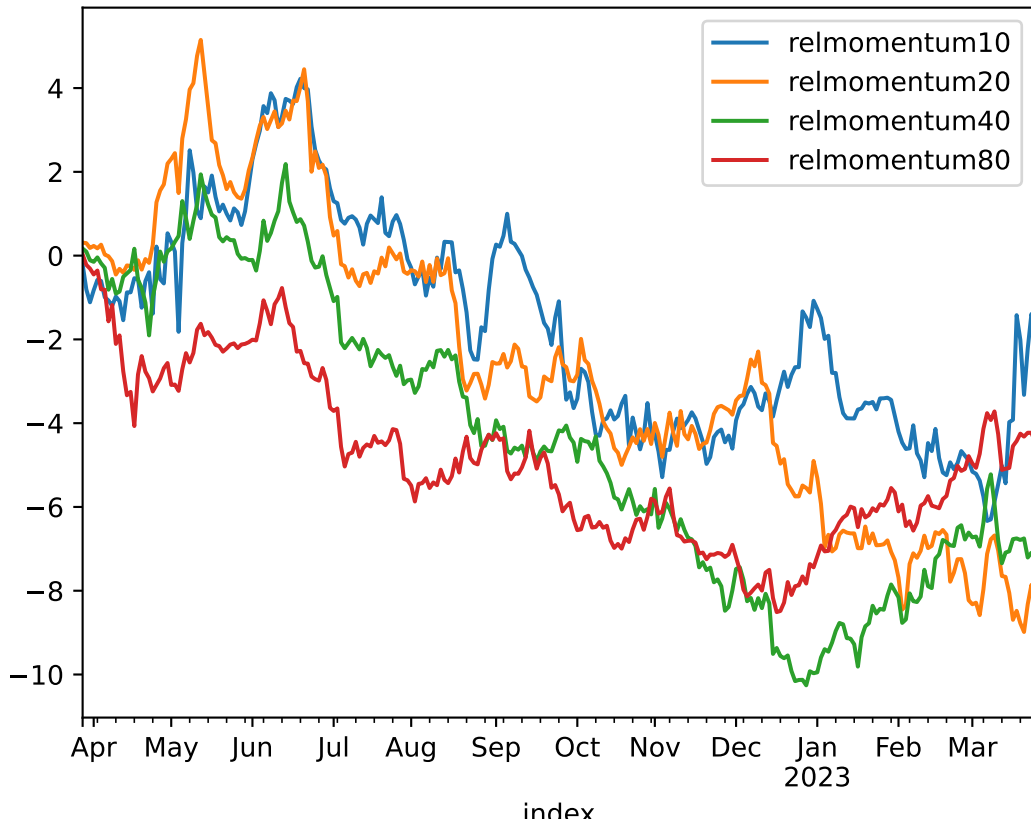


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.707, 'relmomentum20': -8.366, 'relmomentum40': -6.998, 'relmomentum80': -4.395}

ann. std {'relmomentum10': 8.306, 'relmomentum20': 6.522, 'relmomentum40': 5.474, 'relmomentum80': 4.941}

ann. SR {'relmomentum10': -0.21, 'relmomentum20': -1.28, 'relmomentum40': -1.28, 'relmomentum80': -0.89}

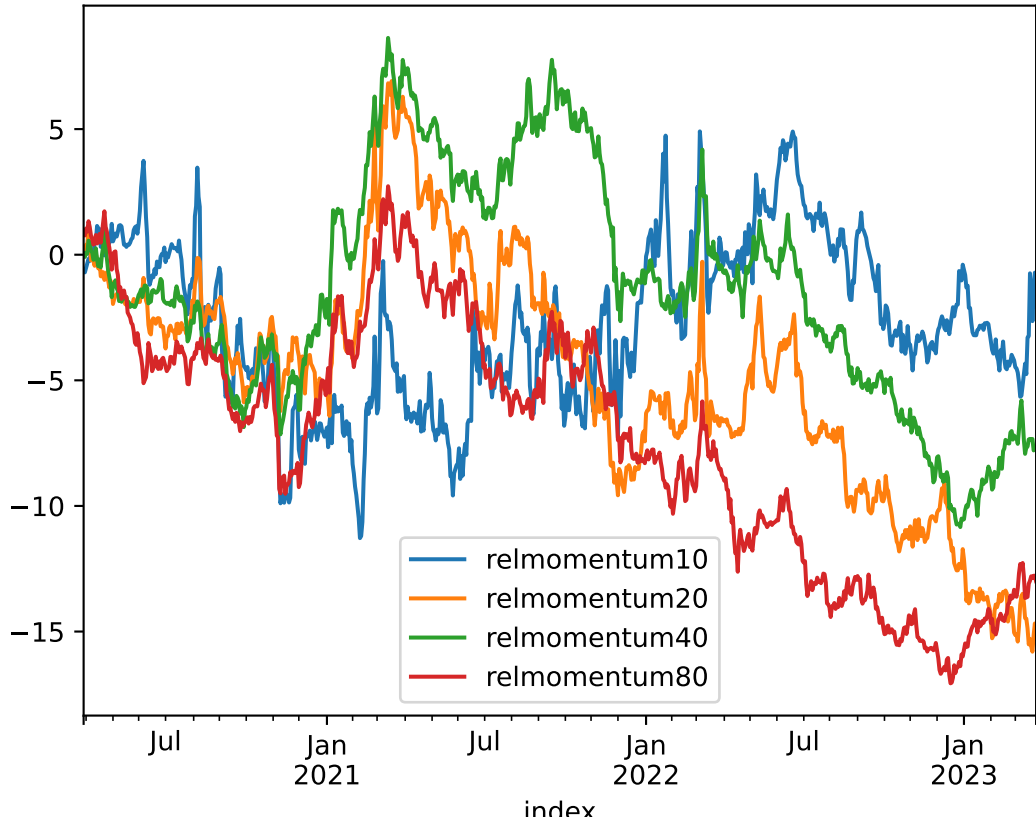


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.343, 'relmomentum20': -5.015, 'relmomentum40': -2.515, 'relmomentum80': -4.266}

ann. std {'relmomentum10': 11.926, 'relmomentum20': 8.338, 'relmomentum40': 6.979, 'relmomentum80': 6.377}

ann. SR {'relmomentum10': -0.03, 'relmomentum20': -0.6, 'relmomentum40': -0.36, 'relmomentum80': -0.67}

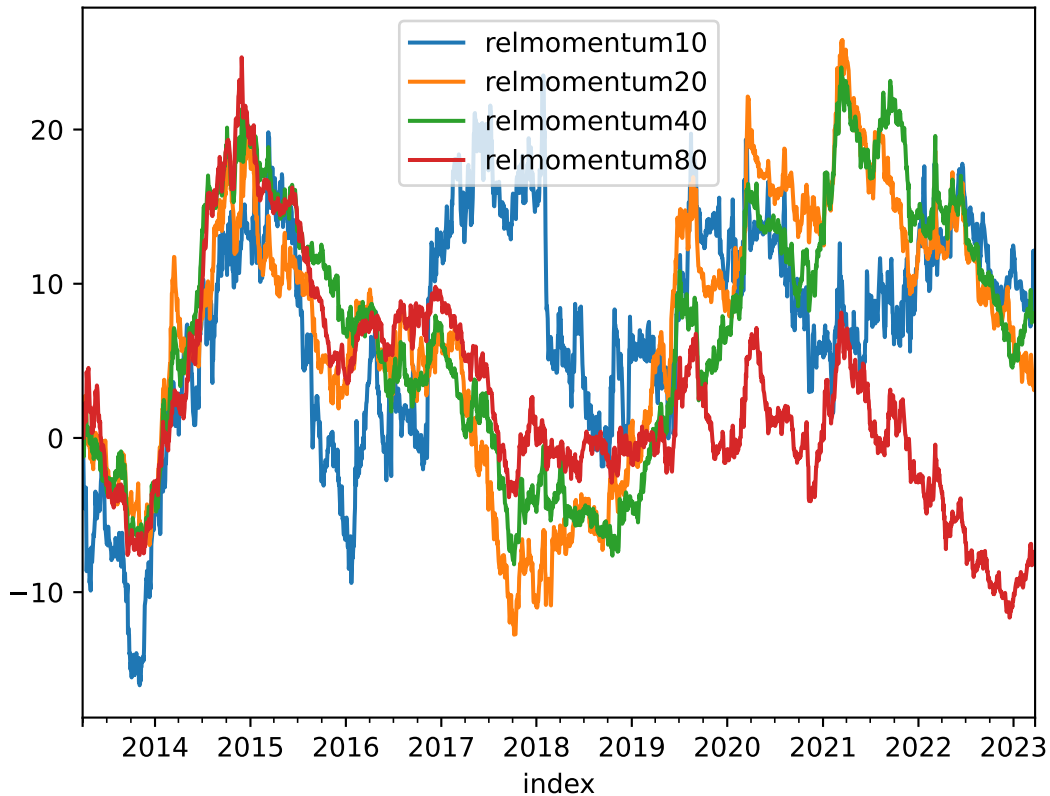


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.163, 'relmomentum20': 0.355, 'relmomentum40': 0.76, 'relmomentum80': -0.746}

ann. std {'relmomentum10': 13.513, 'relmomentum20': 8.654, 'relmomentum40': 7.073, 'relmomentum80': 6.459}

ann. SR {'relmomentum10': 0.09, 'relmomentum20': 0.04, 'relmomentum40': 0.11, 'relmomentum80': -0.12}

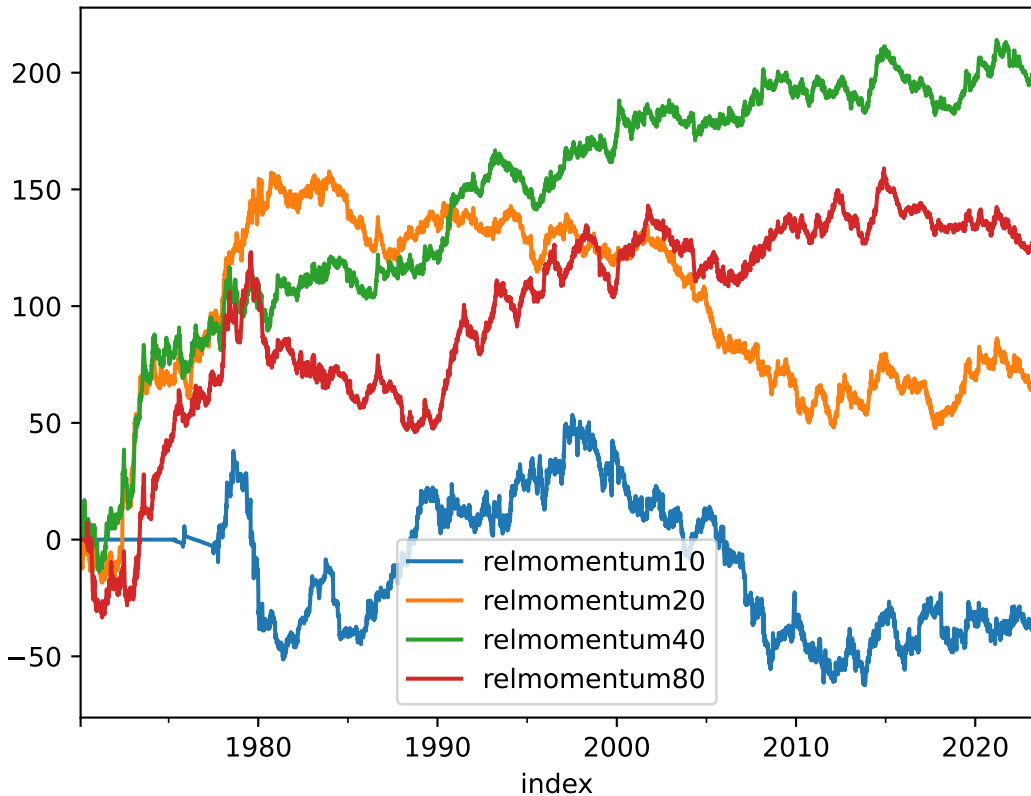


Total Trading Rule P&L for period '99Y'

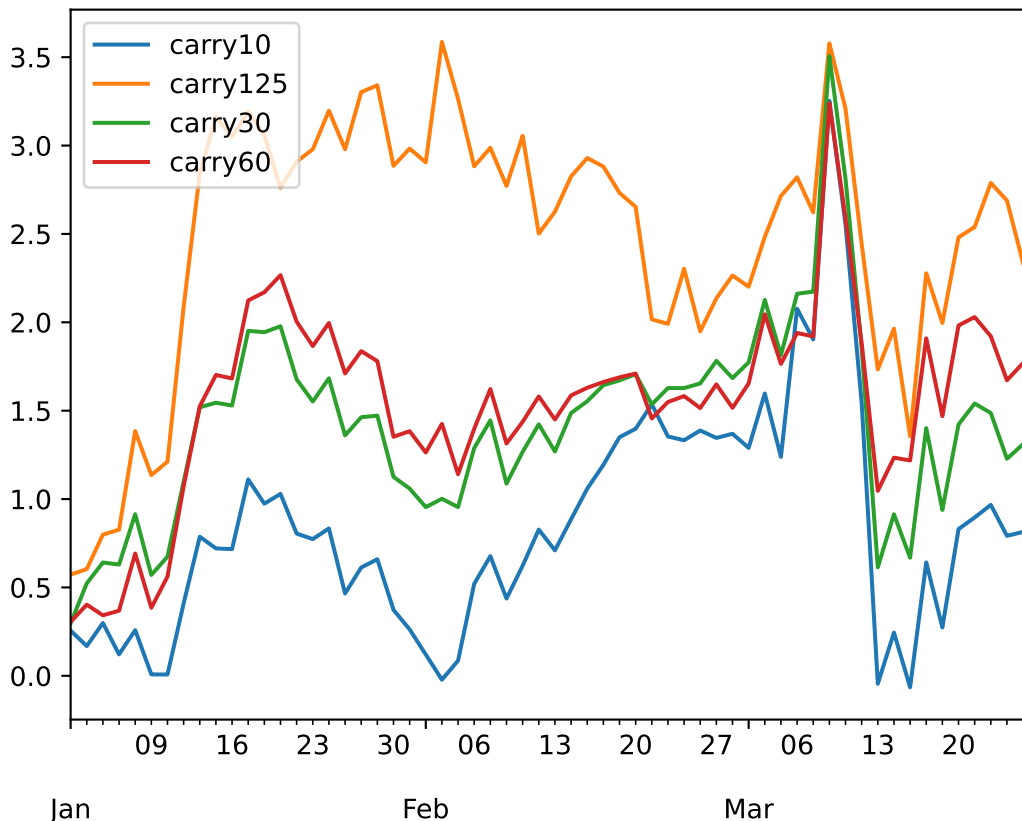
ann. mean {'relmomentum10': -0.638, 'relmomentum20': 1.183, 'relmomentum40': 3.651, 'relmomentum80': 2.341}

ann. std {'relmomentum10': 13.4, 'relmomentum20': 10.474, 'relmomentum40': 9.644, 'relmomentum80': 9.789}

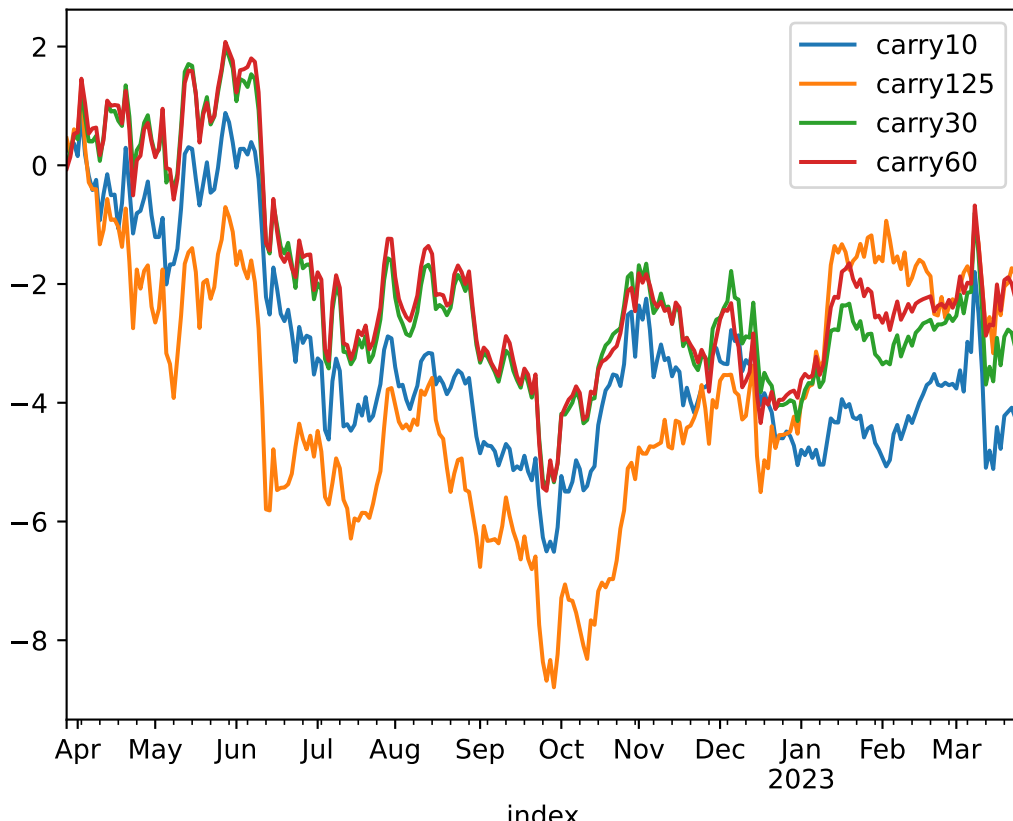
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 3.474, 'carry125': 9.96, 'carry30': 5.593, 'carry60': 7.551}
ann. std {'carry10': 6.437, 'carry125': 6.158, 'carry30': 5.896, 'carry60': 5.353}
ann. SR {'carry10': 0.54, 'carry125': 1.62, 'carry30': 0.95, 'carry60': 1.41}

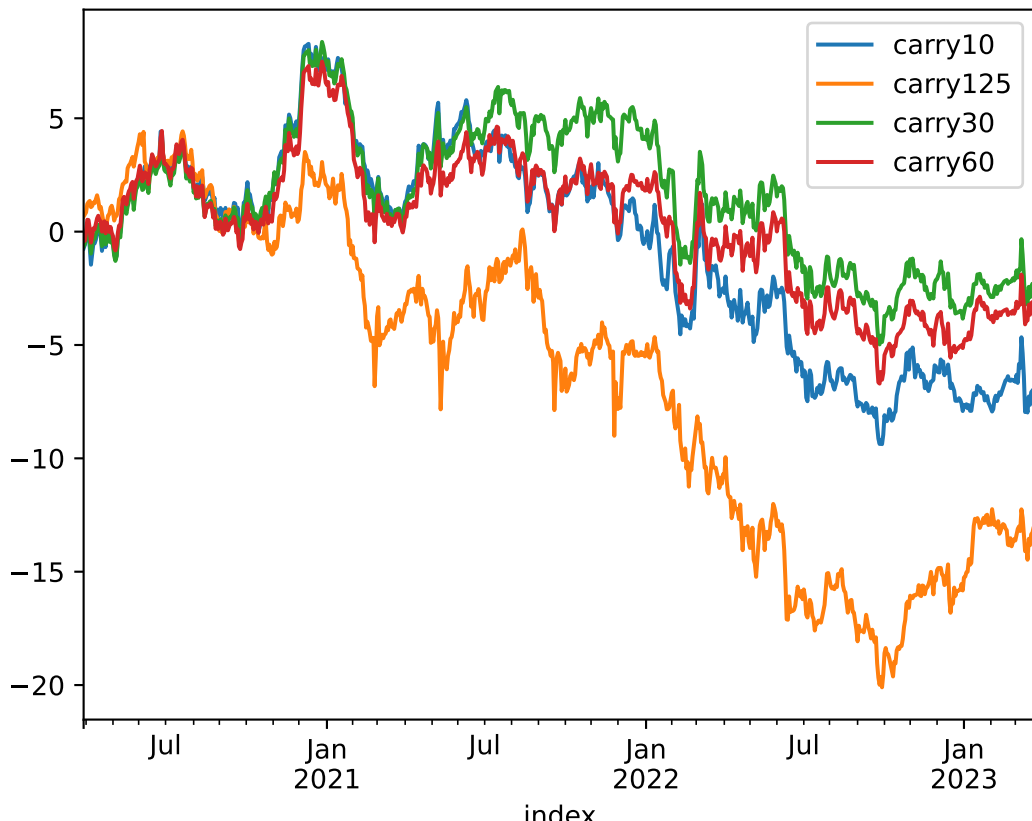


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -4.187, 'carry125': -2.162, 'carry30': -2.963, 'carry60': -2.122}
ann. std {'carry10': 6.349, 'carry125': 7.202, 'carry30': 6.254, 'carry60': 6.321}
ann. SR {'carry10': -0.66, 'carry125': -0.3, 'carry30': -0.47, 'carry60': -0.34}

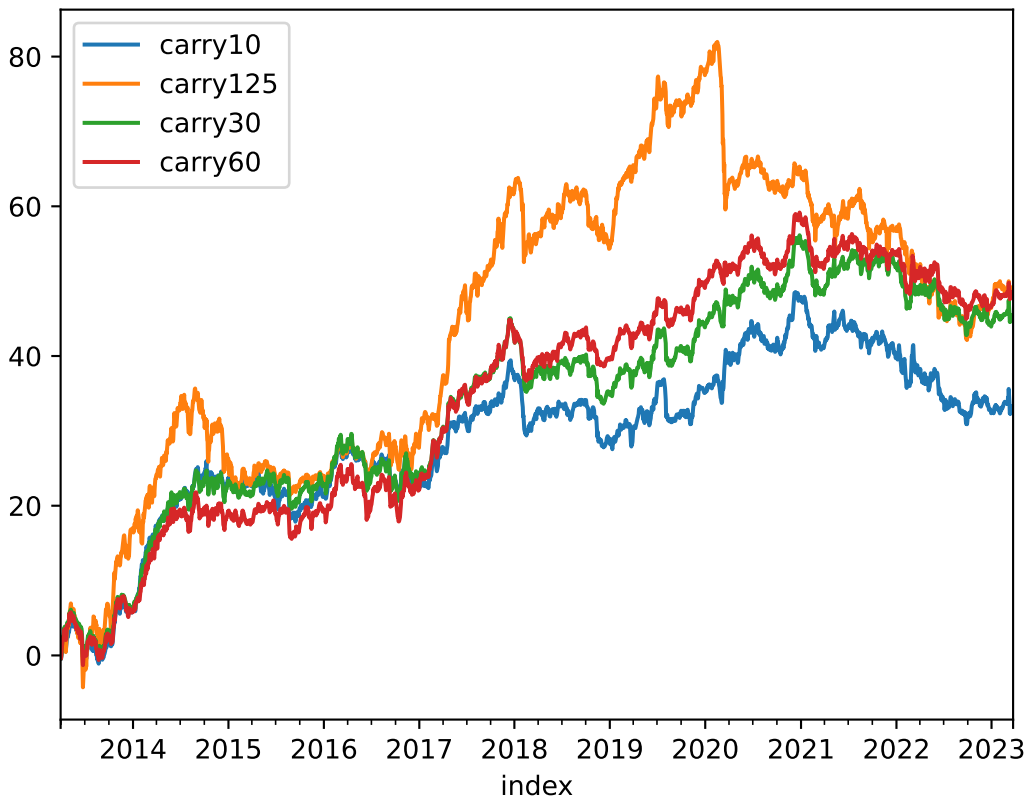


Total Trading Rule P&L for period '3Y'

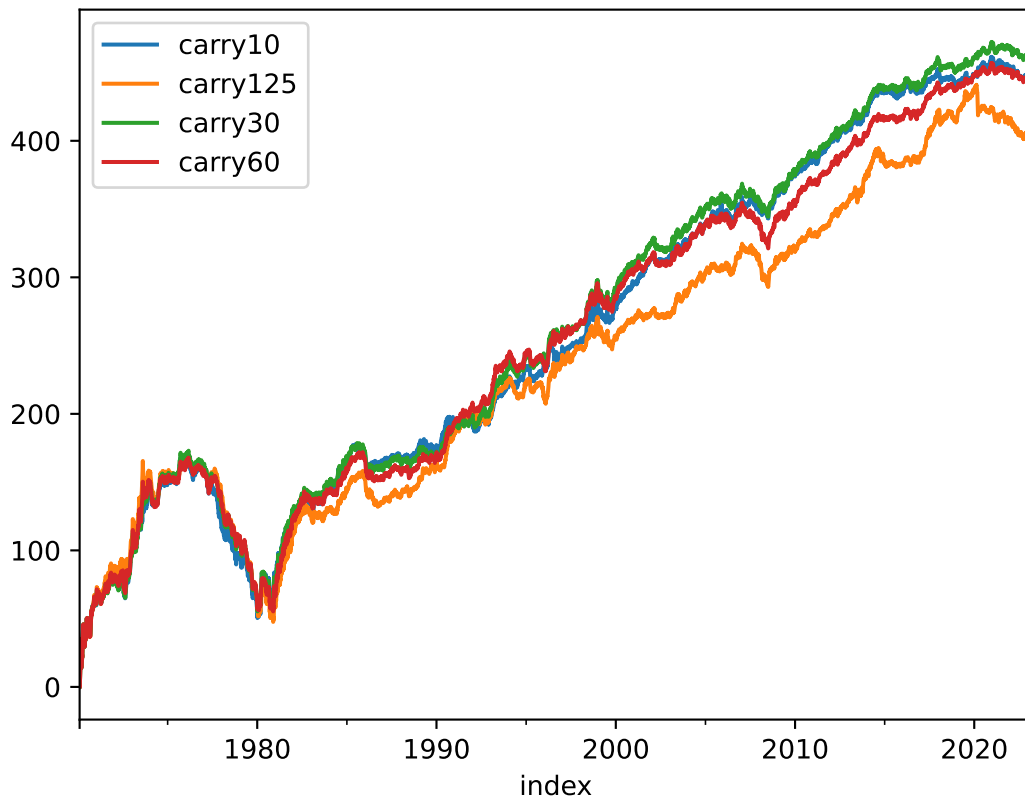
ann. mean	{'carry10': -2.33, 'carry125': -4.429, 'carry30': -0.83, 'carry60': -1.105}
ann. std	{'carry10': 6.611, 'carry125': 8.014, 'carry30': 6.524, 'carry60': 6.508}
ann. SR	{'carry10': -0.35, 'carry125': -0.55, 'carry30': -0.13, 'carry60': -0.17}



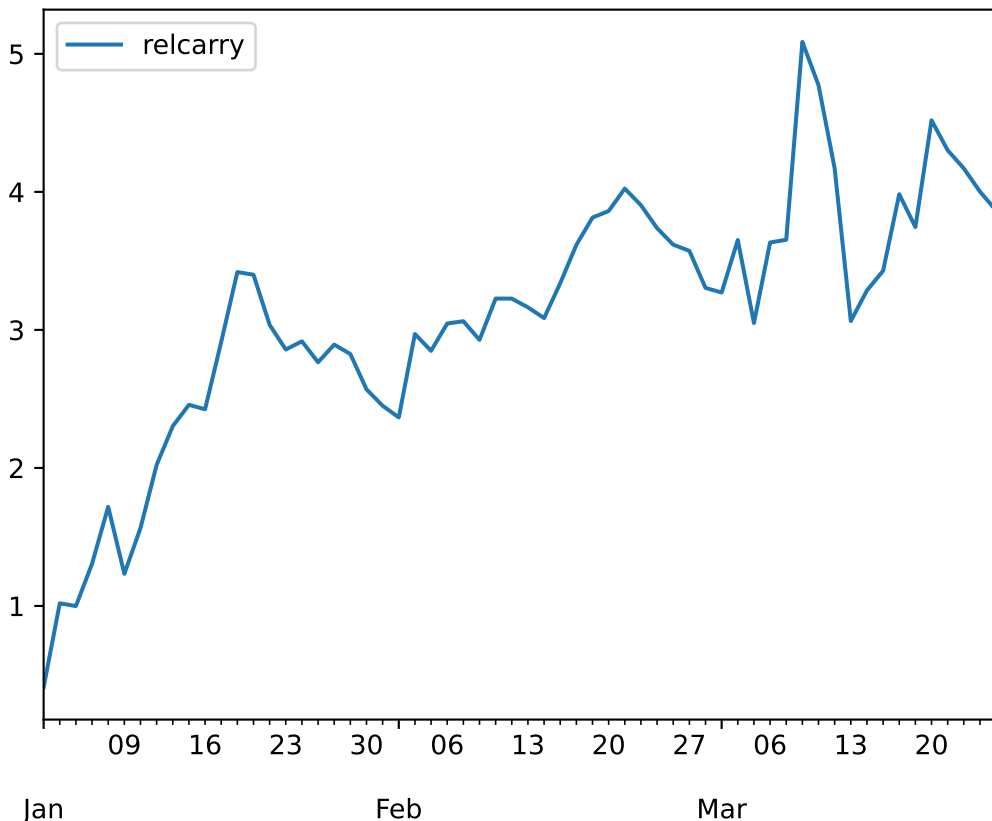
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.258, 'carry125': 4.788, 'carry30': 4.444, 'carry60': 4.745}
ann. std {'carry10': 6.392, 'carry125': 9.005, 'carry30': 6.49, 'carry60': 6.443}
ann. SR {'carry10': 0.51, 'carry125': 0.53, 'carry30': 0.68, 'carry60': 0.74}



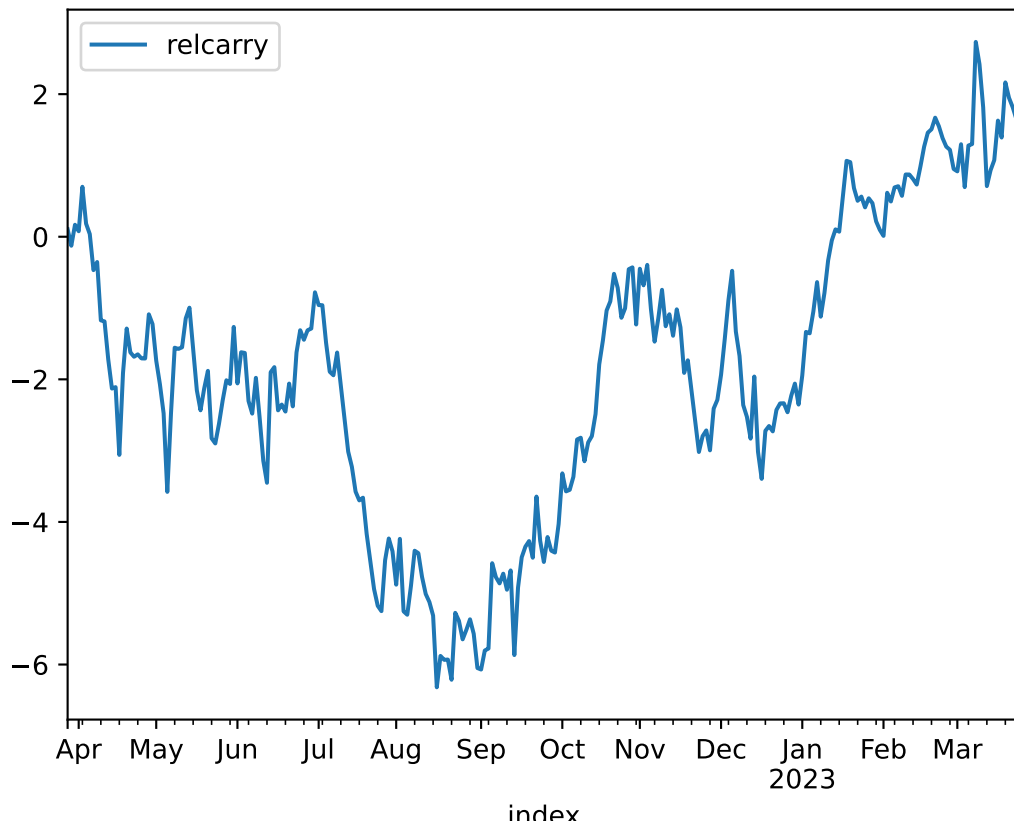
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.238, 'carry125': 7.53, 'carry30': 8.522, 'carry60': 8.239}
ann. std {'carry10': 11.207, 'carry125': 11.565, 'carry30': 11.264, 'carry60': 11.267}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



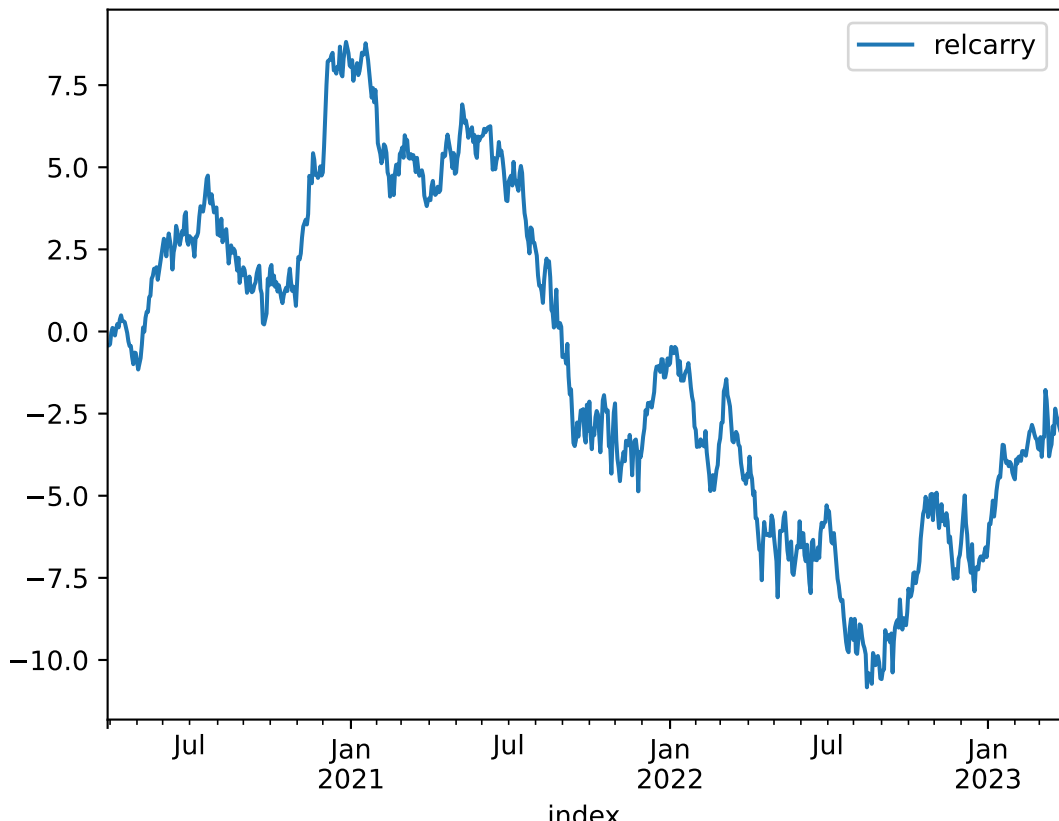
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 16.491}
ann. std {'relcarry': 6.114}
ann. SR {'relcarry': 2.7}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 1.494}
ann. std {'relcarry': 7.223}
ann. SR {'relcarry': 0.21}



Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.985}
ann. std {'relcarry': 6.646}
ann. SR {'relcarry': -0.15}

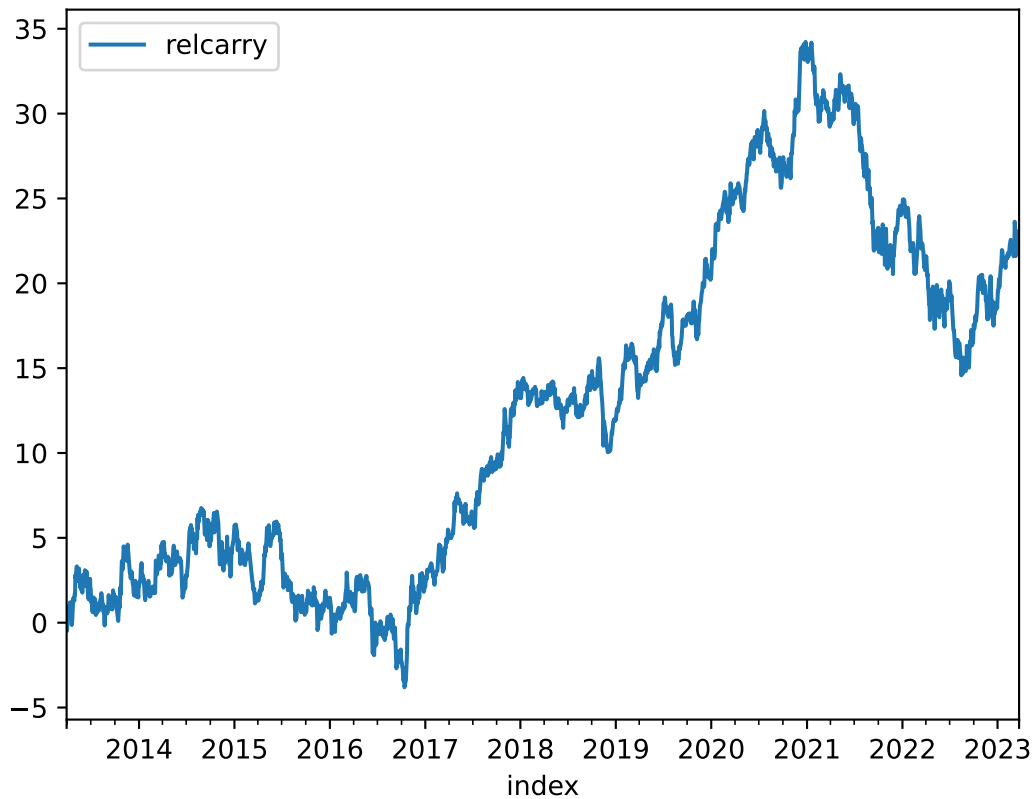


Total Trading Rule P&L for period '10Y'

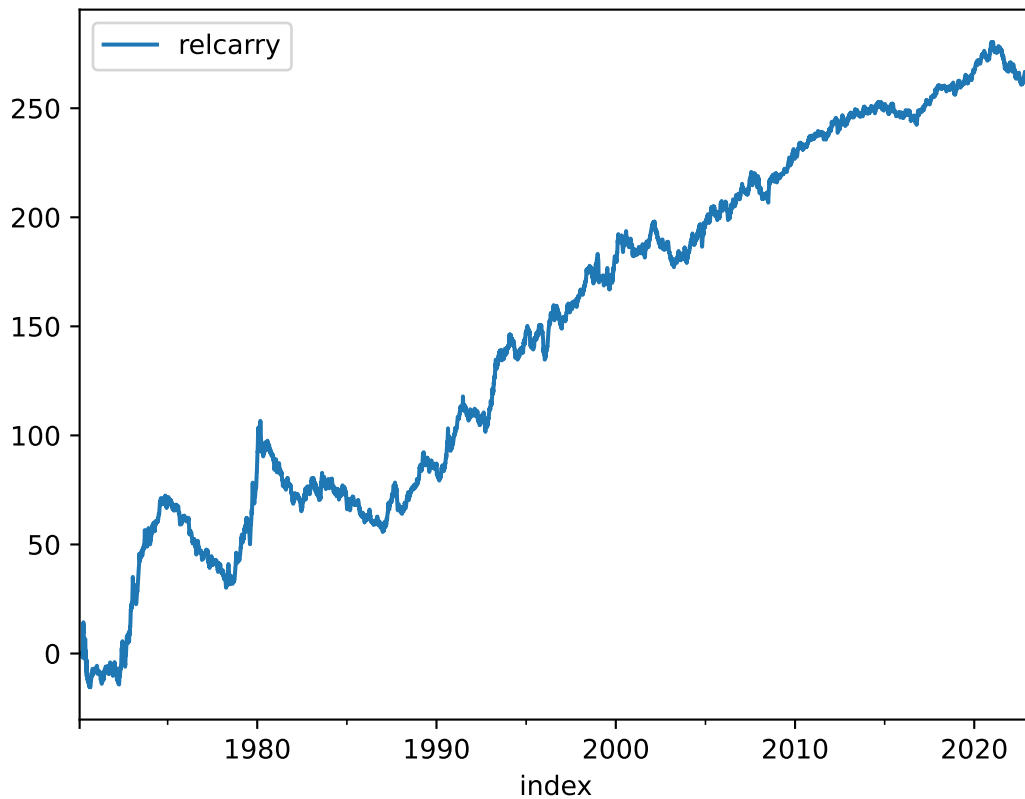
ann. mean {'relcarry': 2.201}

ann. std {'relcarry': 5.84}

ann. SR {'relcarry': 0.38}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.96}
ann. std {'relcarry': 8.963}
ann. SR {'relcarry': 0.55}

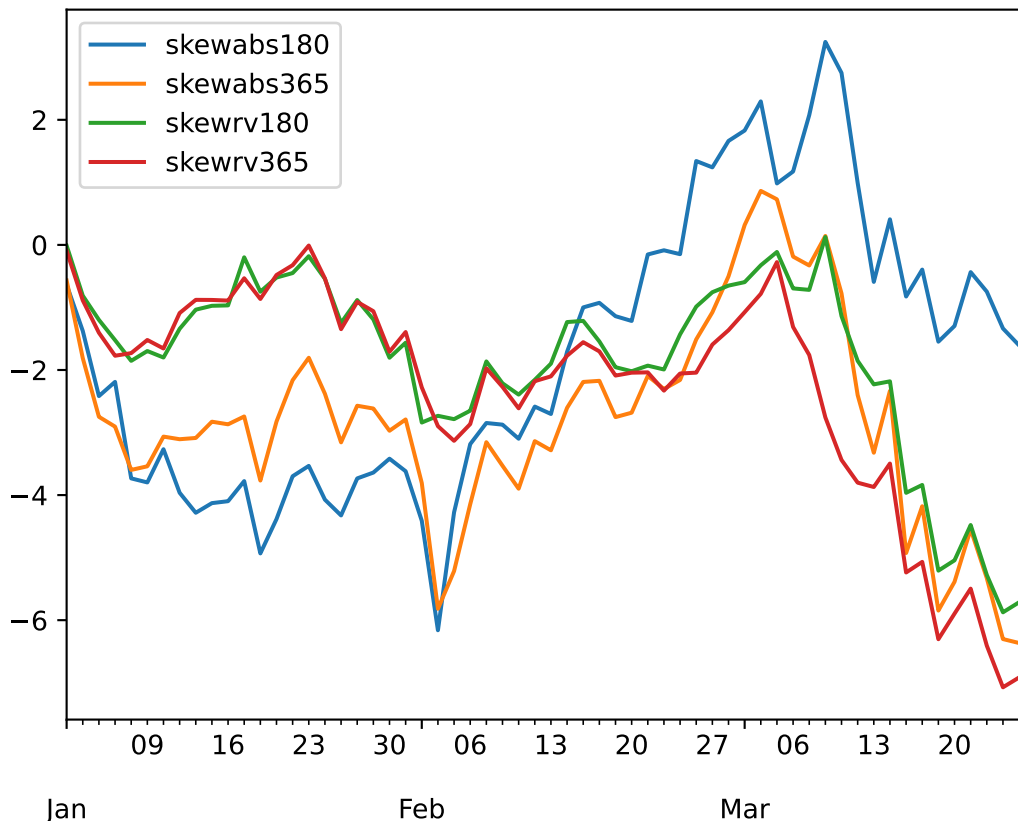


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': -6.853, 'skewabs365': -27.158, 'skewrv180': -24.38, 'skewrv365': -29.509}

ann. std {'skewabs180': 12.796, 'skewabs365': 12.761, 'skewrv180': 8.554, 'skewrv365': 8.264}

ann. SR {'skewabs180': -0.54, 'skewabs365': -2.13, 'skewrv180': -2.85, 'skewrv365': -3.57}

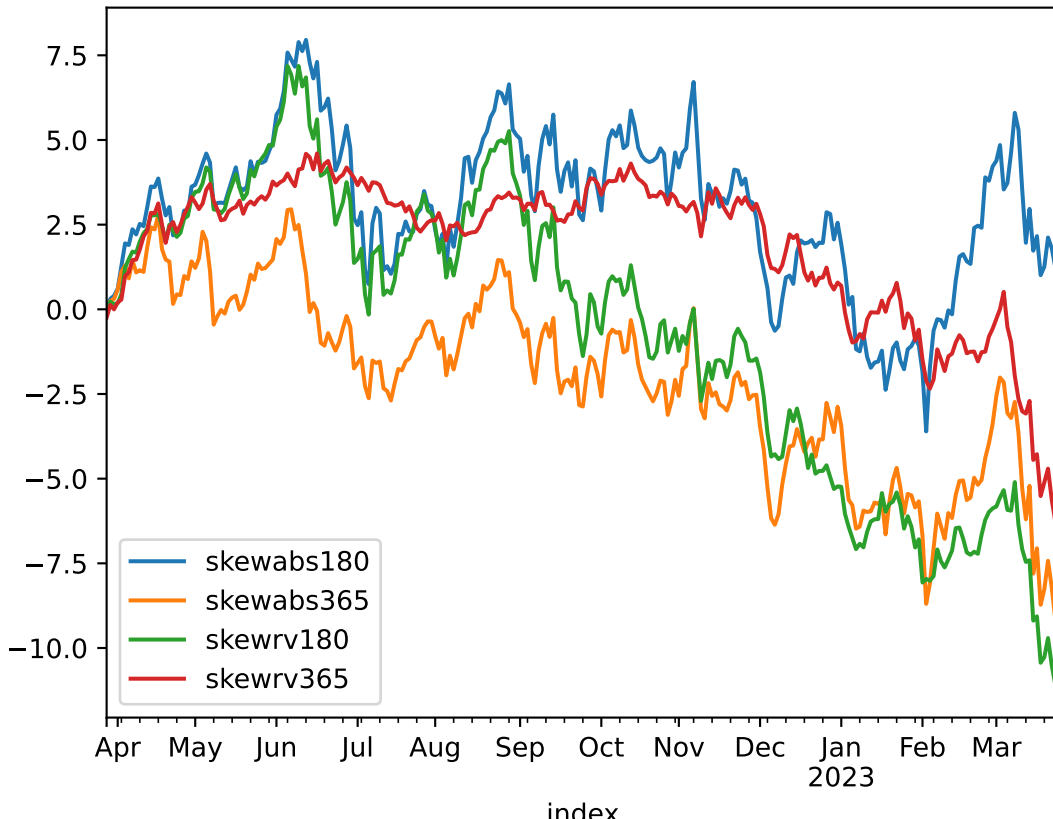


Total Trading Rule P&L for period '1Y'

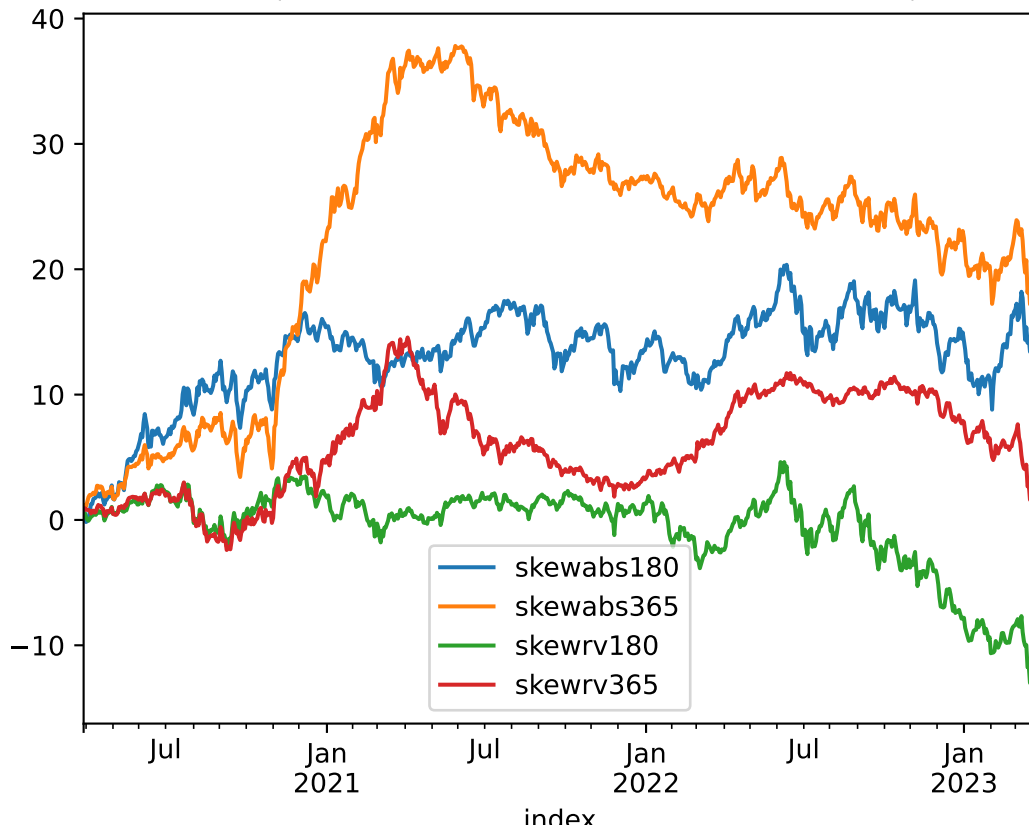
ann. mean {'skewabs180': 0.939, 'skewabs365': -9.136, 'skewrv180': -10.815, 'skewrv365': -6.054}

ann. std {'skewabs180': 11.052, 'skewabs365': 9.905, 'skewrv180': 9.194, 'skewrv365': 5.604}

ann. SR {'skewabs180': 0.08, 'skewabs365': -0.92, 'skewrv180': -1.18, 'skewrv365': -1.08}



Total Trading Rule P&L for period '3Y'
ann. mean {'skewabs180': 4.382, 'skewabs365': 5.478, 'skewrv180': -4.434, 'skewrv365': 0.326}
ann. std {'skewabs180': 9.113, 'skewabs365': 8.848, 'skewrv180': 7.17, 'skewrv365': 6.265}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.62, 'skewrv180': -0.62, 'skewrv365': 0.05}

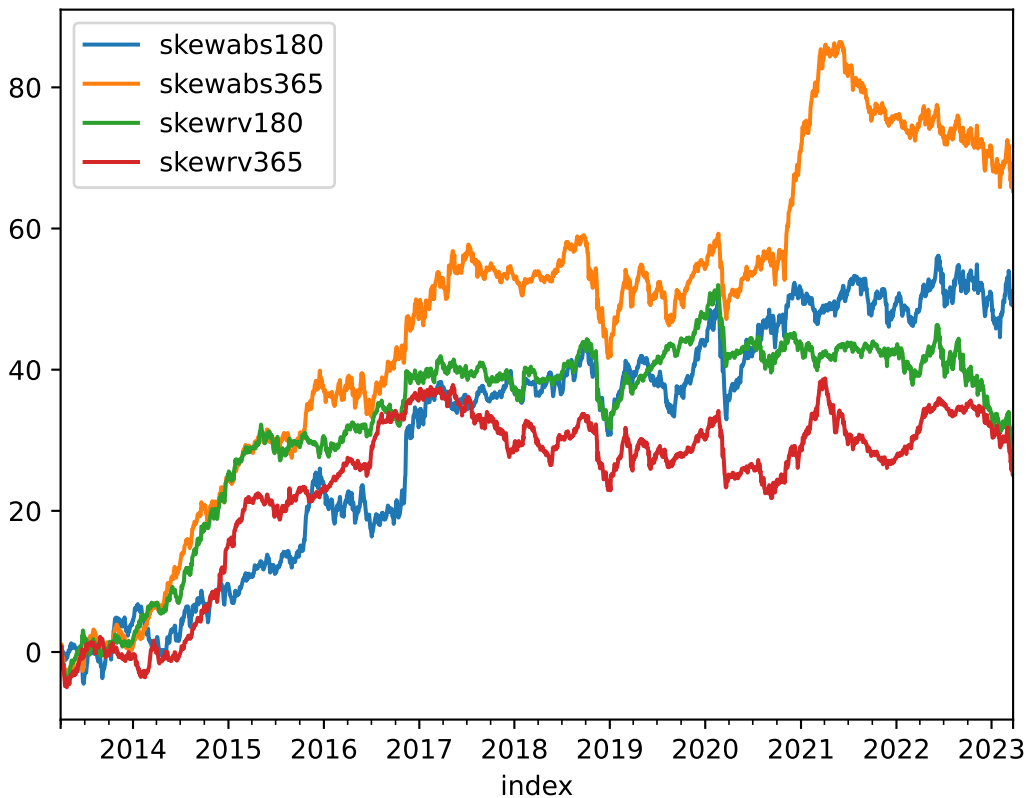


Total Trading Rule P&L for period '10Y'

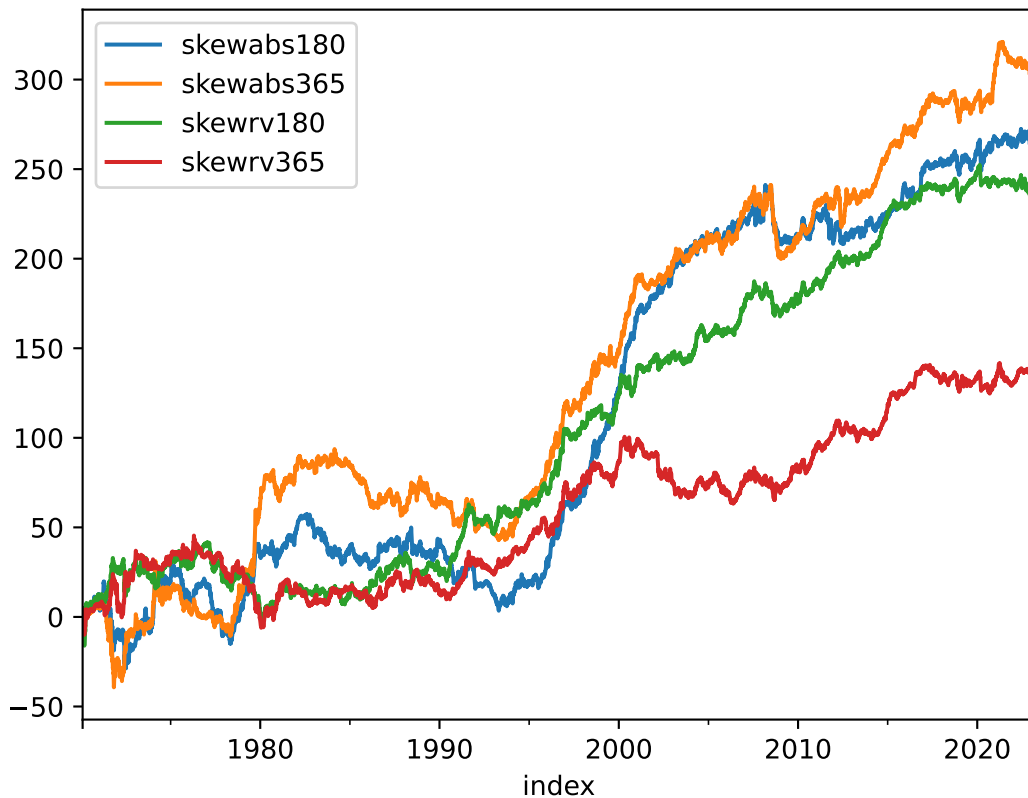
ann. mean {'skewabs180': 4.829, 'skewabs365': 6.416, 'skewrv180': 2.77, 'skewrv365': 2.476}

ann. std {'skewabs180': 7.997, 'skewabs365': 7.967, 'skewrv180': 6.395, 'skewrv365': 6.084}

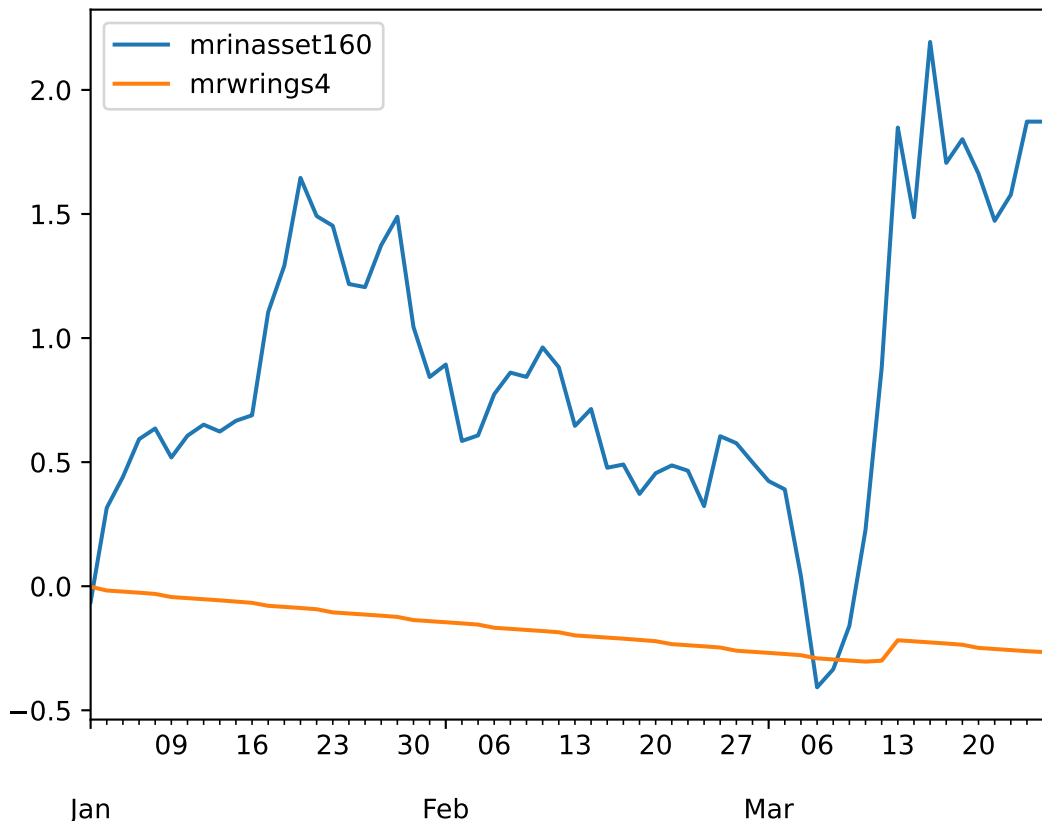
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.81, 'skewrv180': 0.43, 'skewrv365': 0.41}



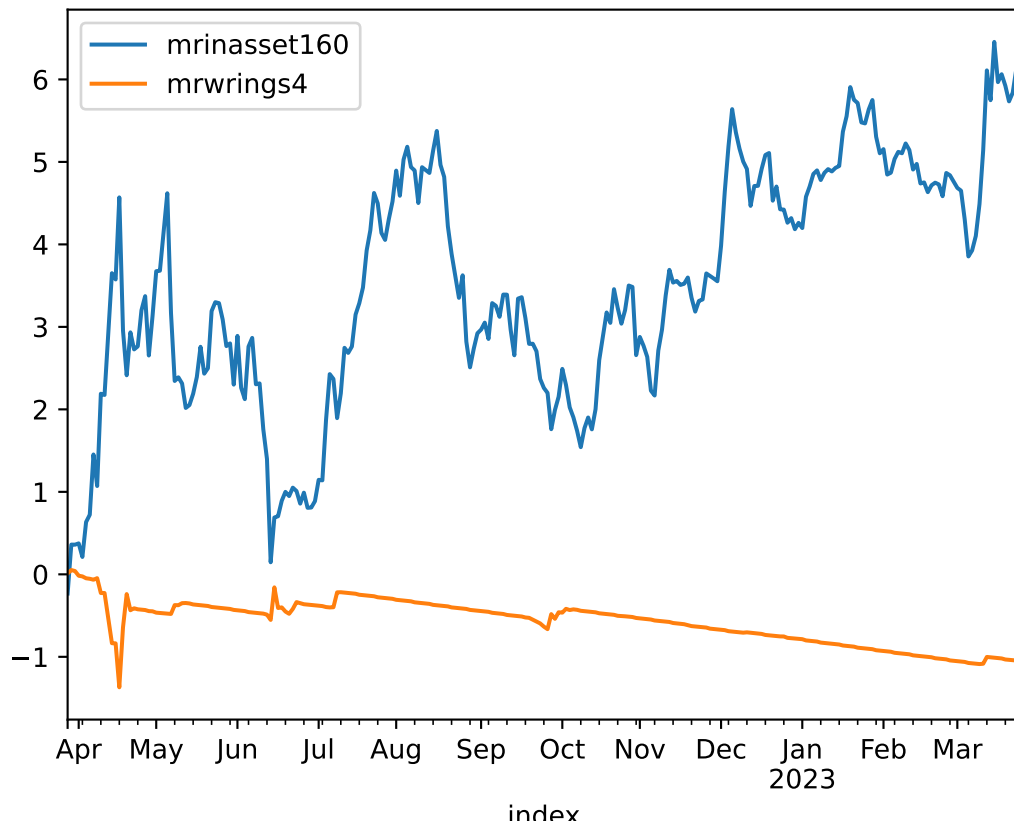
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.9, 'skewabs365': 5.538, 'skewrv180': 4.22, 'skewrv365': 2.365}
ann. std {'skewabs180': 10.103, 'skewabs365': 9.869, 'skewrv180': 8.753, 'skewrv365': 8.124}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



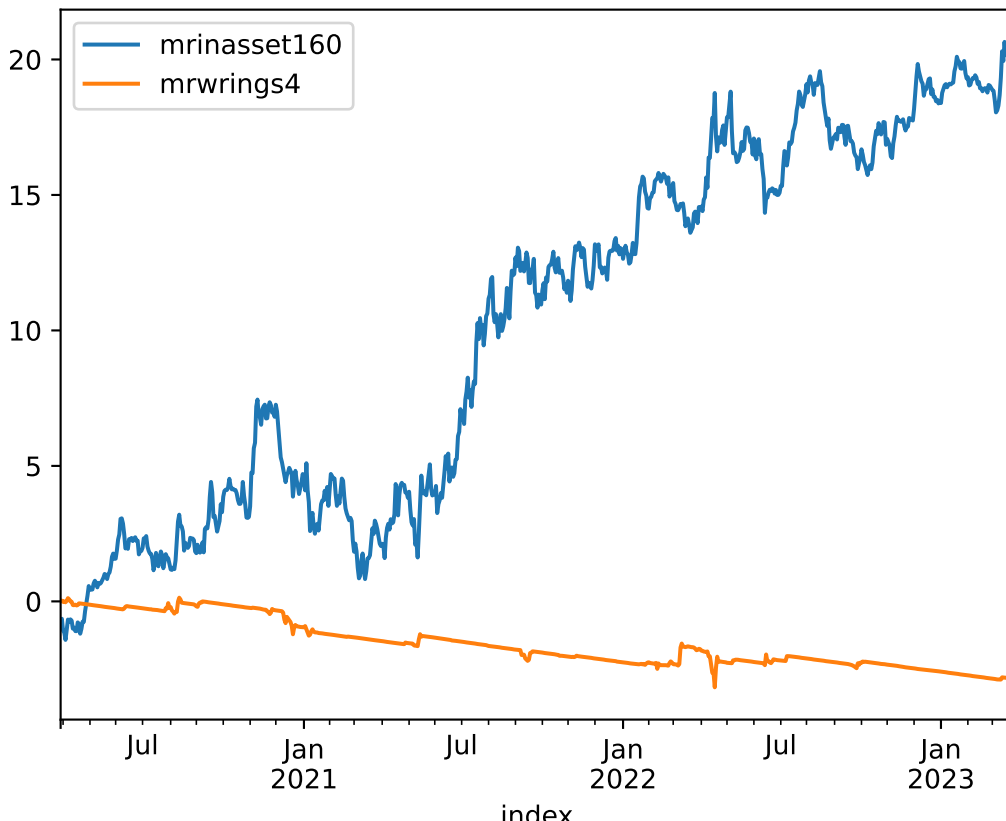
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 7.988, 'mrwrings4': -1.132}
ann. std {'mrinasset160': 4.248, 'mrwrings4': 0.191}
ann. SR {'mrinasset160': 1.88, 'mrwrings4': -5.93}



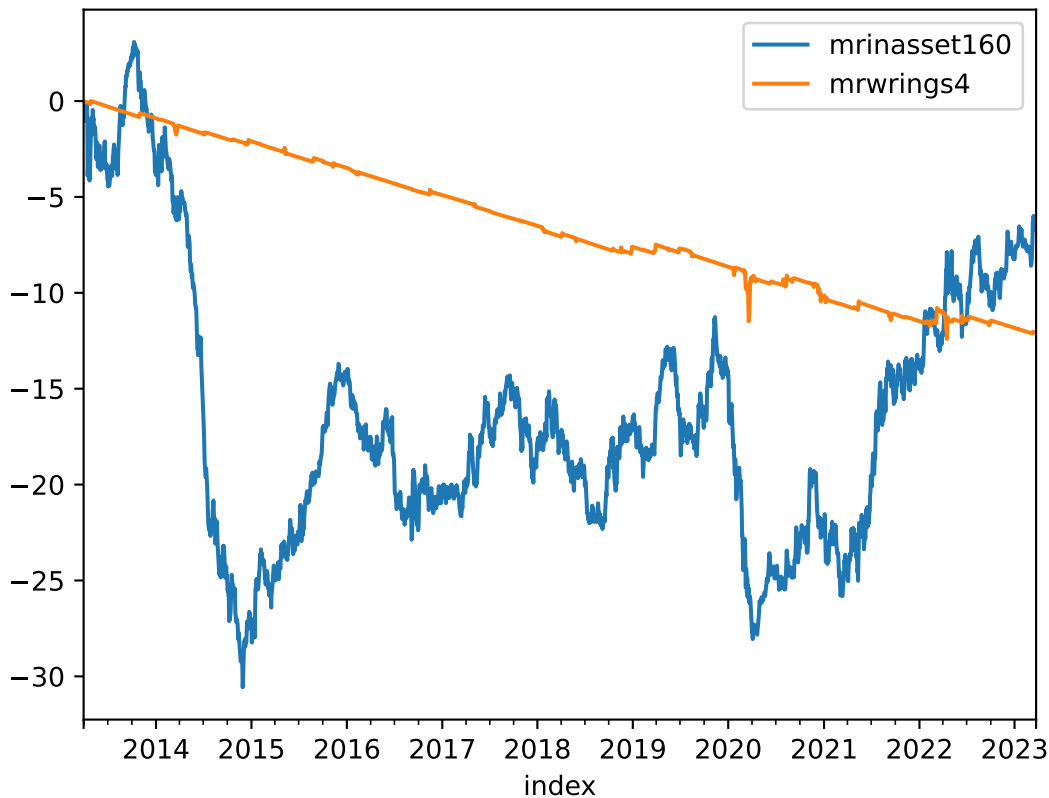
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 6.062, 'mrwrings4': -1.037}
ann. std {'mrinasset160': 5.785, 'mrwrings4': 1.253}
ann. SR {'mrinasset160': 1.05, 'mrwrings4': -0.83}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.671, 'mrwrings4': -0.936}
ann. std {'mrinasset160': 6.27, 'mrwrings4': 1.025}
ann. SR {'mrinasset160': 1.06, 'mrwrings4': -0.91}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.62, 'mrwrings4': -1.187}
ann. std {'mrinasset160': 6.312, 'mrwrings4': 0.881}
ann. SR {'mrinasset160': -0.1, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.529, 'mrwrings4': -2.107}
ann. std {'mrinasset160': 9.874, 'mrwrings4': 2.089}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.01}

